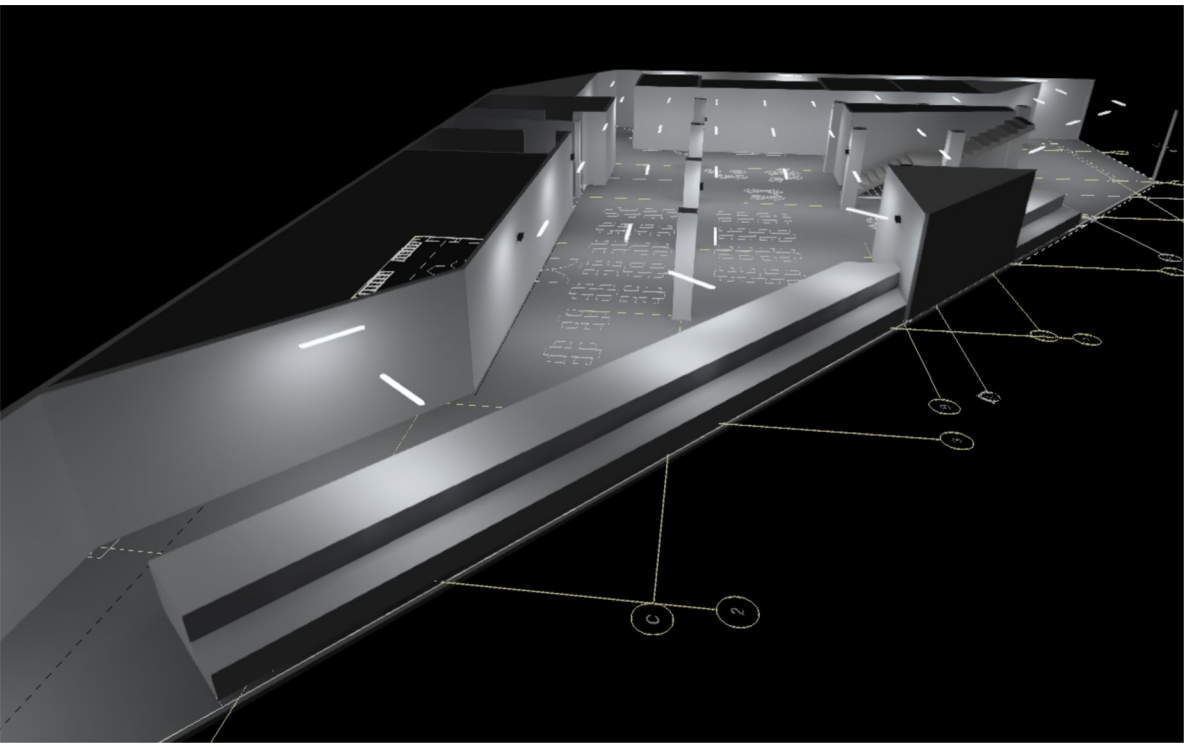


Unidad deportiva - Santafe de Antioquia

Informe de iluminacion del Piso 1

Created with DIALux

Table of Contents

Cover 1
Table of Contents 2
Description 3
Luminaire list 4

Product data sheets

Not yet a DIALux member - HERMÉTICA LRL10036BL-36W (1x) 5
SYLVANIA - SYLVANIA P23342-LED EMERG R1 2X1.6W (1x) 6

Piso 1 - Piso 1 - Storey 1

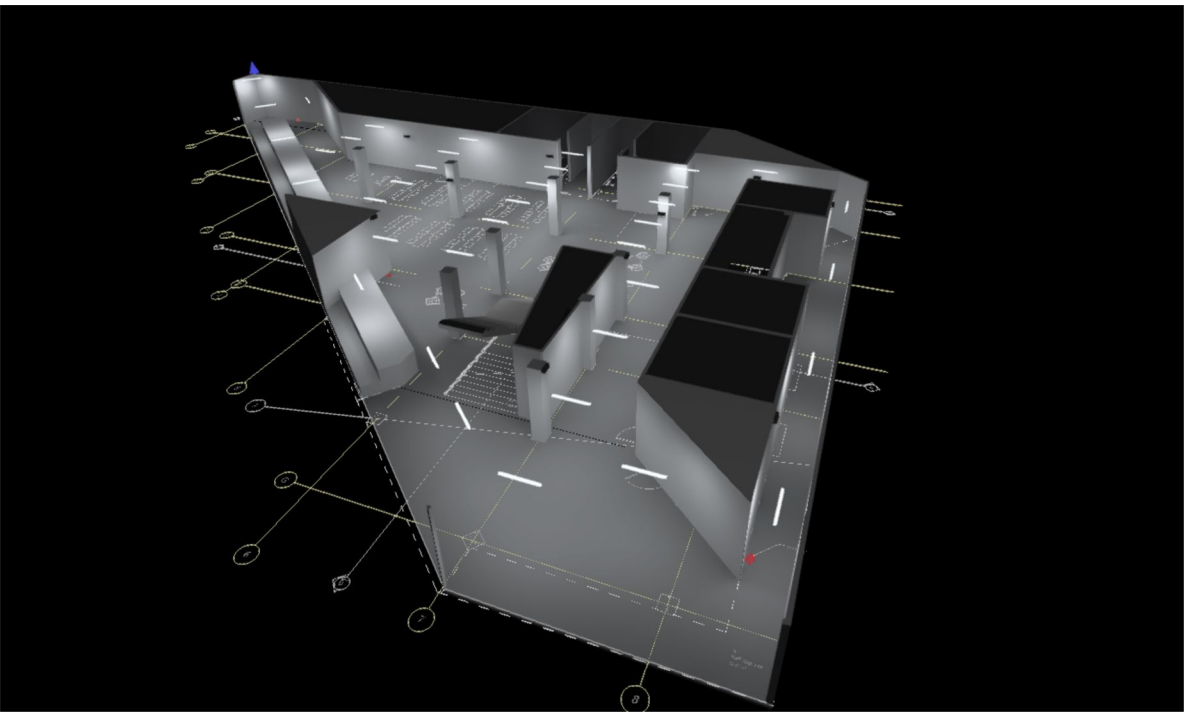
Circulacion

Summary / Emergency light scene 7
Summary / Light scene 1 9
Luminaire layout plan 11
Calculation objects / Light scene 1 14
Circulacion 2 / Emergency light scene / Perpendicular illuminance 18
Circulacion 2 / Light scene 1 / Perpendicular illuminance 19

Piso 1 - Piso 1 - Storey 1

Room 1

Summary / Emergency light scene 20
Summary / Light scene 1 22
Luminaire layout plan 24
Luminaire list 31
Zona de mesas / Emergency light scene / Perpendicular illuminance 32
Circulacion entrada / Emergency light scene / Perpendicular illuminance 33
emergencia 1 / Emergency light scene / Perpendicular illuminance 34
Zona de mesas / Light scene 1 / Perpendicular illuminance 35
Gradas / Light scene 1 / Perpendicular illuminance 36
Circulacion entrada / Light scene 1 / Perpendicular illuminance 37
Gradas 2 / Light scene 1 / Perpendicular illuminance 38
CIrculacion 2 / Light scene 1 / Perpendicular illuminance 39



Description

Presentar los valores de iluminacion correspondientes a las diferentes areas y validar que cumplan con los parametros establecidos en el RETILAP.

Luminaire list

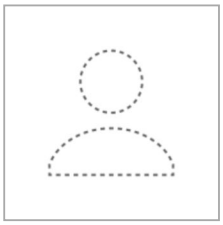
Φ_{total}	P_{total}	Luminous efficacy	$\Phi_{Emergency\ lighting}$
132454 lm	1394.6 W	95.0 lm/W	1848 lm

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
38	Not yet a DIALux member	HERMÉTICA LRL10036BL	HERMÉTICA LRL10036BL-36W		3437 lm	93.6 lm/W
12	SYLVANIA		SYLVANIA P23342-LED EMERG R1 2X1.6W		154 lm	∞ lm/W
					154 lm (100 %)	-

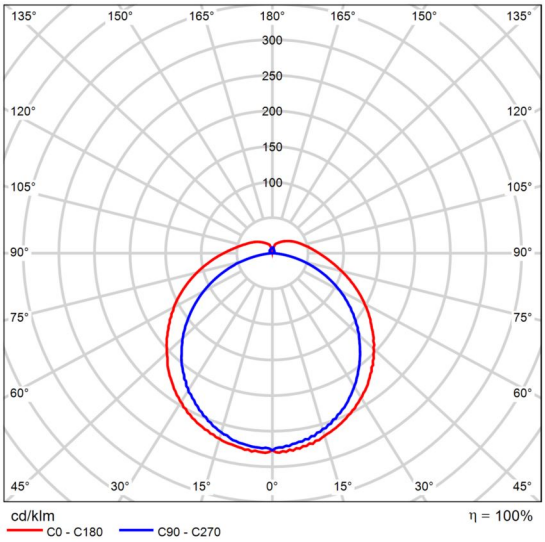
DIALux

Product data sheet

Not yet a DIALux member - HERMÉTICA LRL10036BL-36W



Article No.	HERMÉTICA LRL10036BL
P	36.7 W
Φ_{Lamp}	3438 lm
$\Phi_{Luminaire}$	3437 lm
η	99.98 %
Luminous efficacy	93.6 lm/W
CCT	3000 K
CRI	100



Polar LDC

DIALux

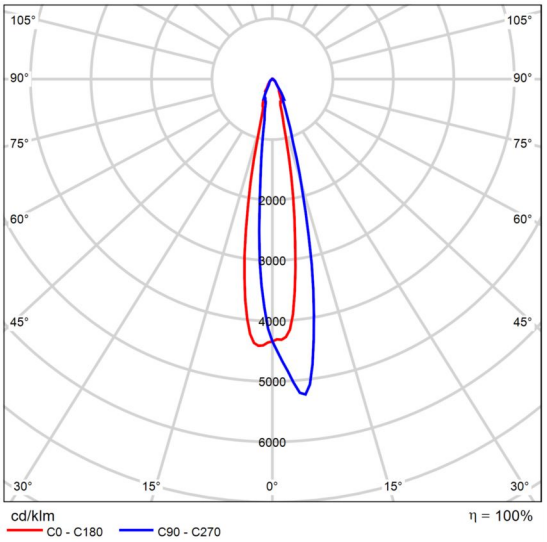
Product data sheet

SYLVANIA - SYLVANIA P23342-LED EMERG R1 2X1.6W

Φ_{Lamp}	154 lm
$\Phi_{Luminaire}$	154 lm
$\Phi_{Emergency\ lighting}$	154 lm
η	99.91 %
Luminous efficacy	∞ lm/W
CCT	3000 K
CRI	100
ELF	100 %

γ	C0°	C90°	C0°- C360°
0°-180°	667.33	801.08	801.94
60°-90°	5.53	5.20	5.54

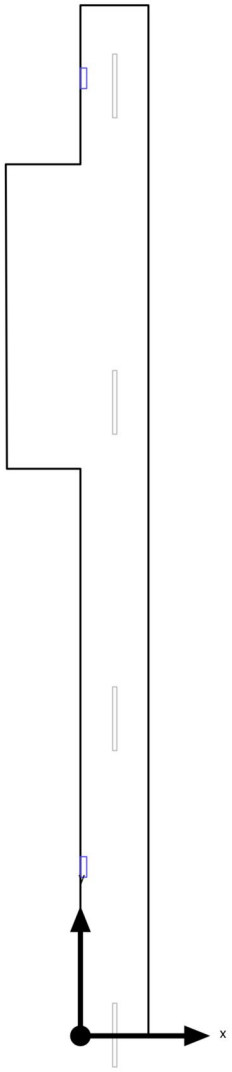
Glare valuation table [cd]



Polar LDC

Piso 1 · Storey 1 · Circulacion (Emergency light scene)

Summary



Ground area	33.85 m²
Reflection factors	Ceiling: 70.0 %, Walls: 50.3 %, Floor: 20.0 %
Maintenance factor	0.80 (fixed)

Clearance height	3.000 m
Mounting height	3.000 m

Piso 1 · Storey 1 · Circulacion (Emergency light scene)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Room	Lighting power density	0.00 W/m²	–		

(2) Calculated using DIN:18599-4.

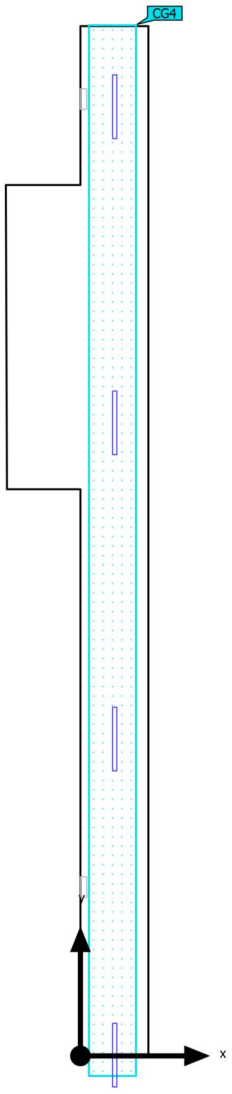
Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Luminaire list

pcs.	Manufacturer	Article No.	Article name	Φ	Luminous efficacy
2	SYLVANIA		SYLVANIA P23342-LED EMERG R1 2X1.6W	154 lm	∞ lm/W
				154 lm (100 %)	-

Piso 1 · Storey 1 · Circulacion (Light scene 1)

Summary



Ground area	33.85 m²
Reflection factors	Ceiling: 70.0 %, Walls: 50.3 %, Floor: 20.0 %
Maintenance factor	0.80 (fixed)

Clearance height	3.000 m
Mounting height	3.000 m

Piso 1 · Storey 1 · Circulacion (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Energy estimation(2)	Consumption	161 kWh/a	max. 1200 kWh/a	✓	
Room	Lighting power density	4.34 W/m²	–		

(1) Based on a rectangular space of 2.727 m x 19.700 m and SHR of 0.25.
(2) Calculated using DIN:18599-4.

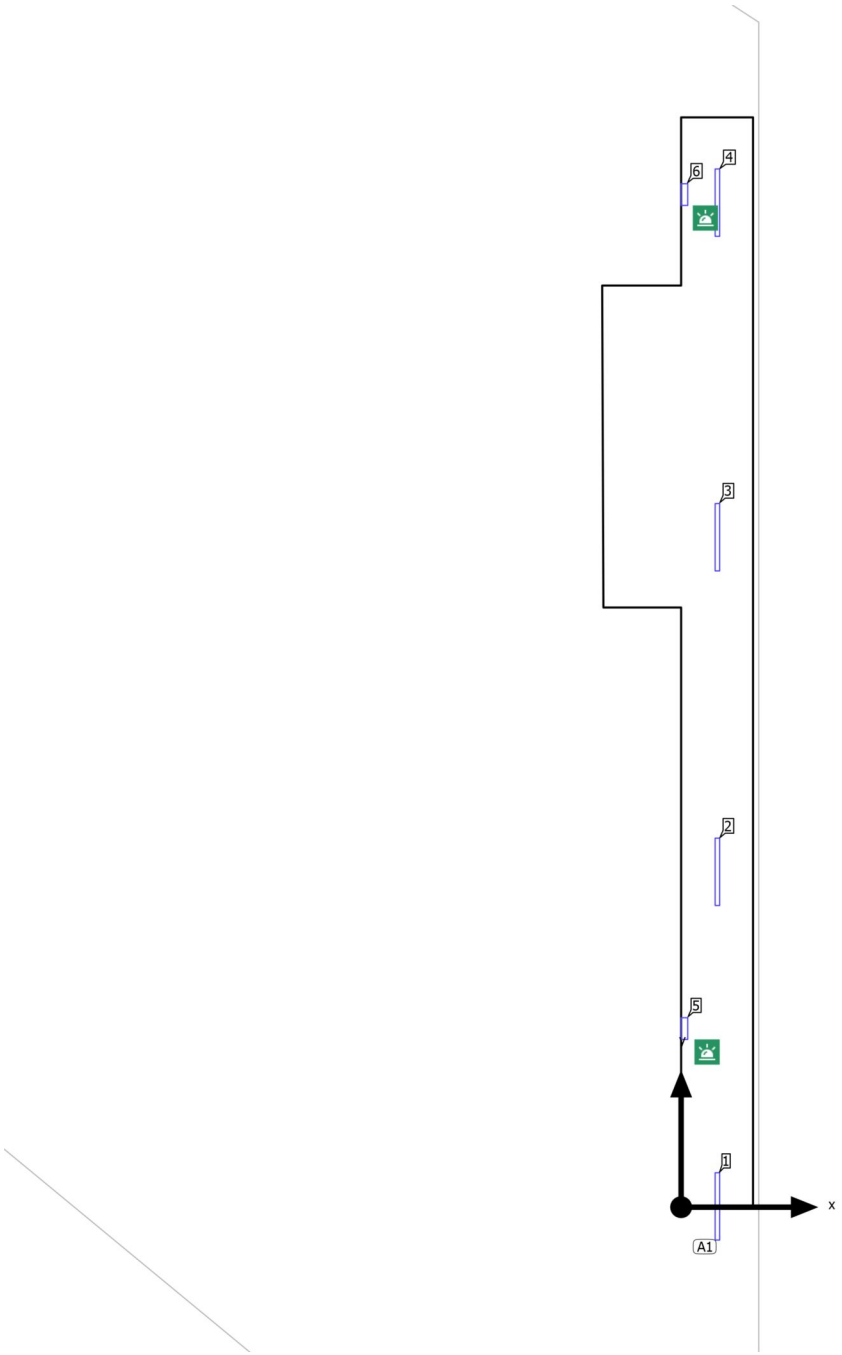
Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	R_{UG}	P	Φ	Luminous efficacy
4	Not yet a DIALux member	HERMÉTICA LRL10036BL	HERMÉTICA LRL10036BL-36W	–	36.7 W	3437 lm	93.6 lm/W

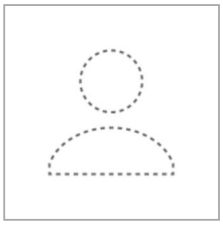
Piso 1 · Storey 1 · Circulacion

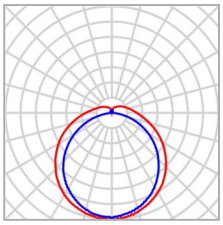
Luminaire layout plan



Piso 1 · Storey 1 · Circulacion

Luminaire layout plan





Manufacturer	Not yet a DIALux member
Article No.	HERMÉTICA LRL10036BL
Article name	HERMÉTICA LRL10036BL-36W
Fitting	1x

P	36.7 W
$\Phi_{Luminaire}$	3437 lm

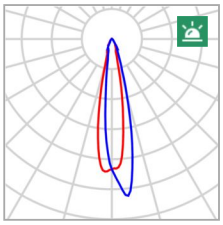
4 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	0.656 m / 0.014 m / 3.000 m
X-direction	1 pcs., Centre - centre, 1.288 m
Y-direction	4 pcs., Centre - centre, 6.048 m
Arrangement	A1

X	Y	Mounting height	Luminaire
0.656 m	0.014 m	3.000 m	1
0.656 m	6.062 m	3.000 m	2
0.656 m	12.110 m	3.000 m	3
0.656 m	18.159 m	3.000 m	4

Piso 1 · Storey 1 · Circulacion

Luminaire layout plan



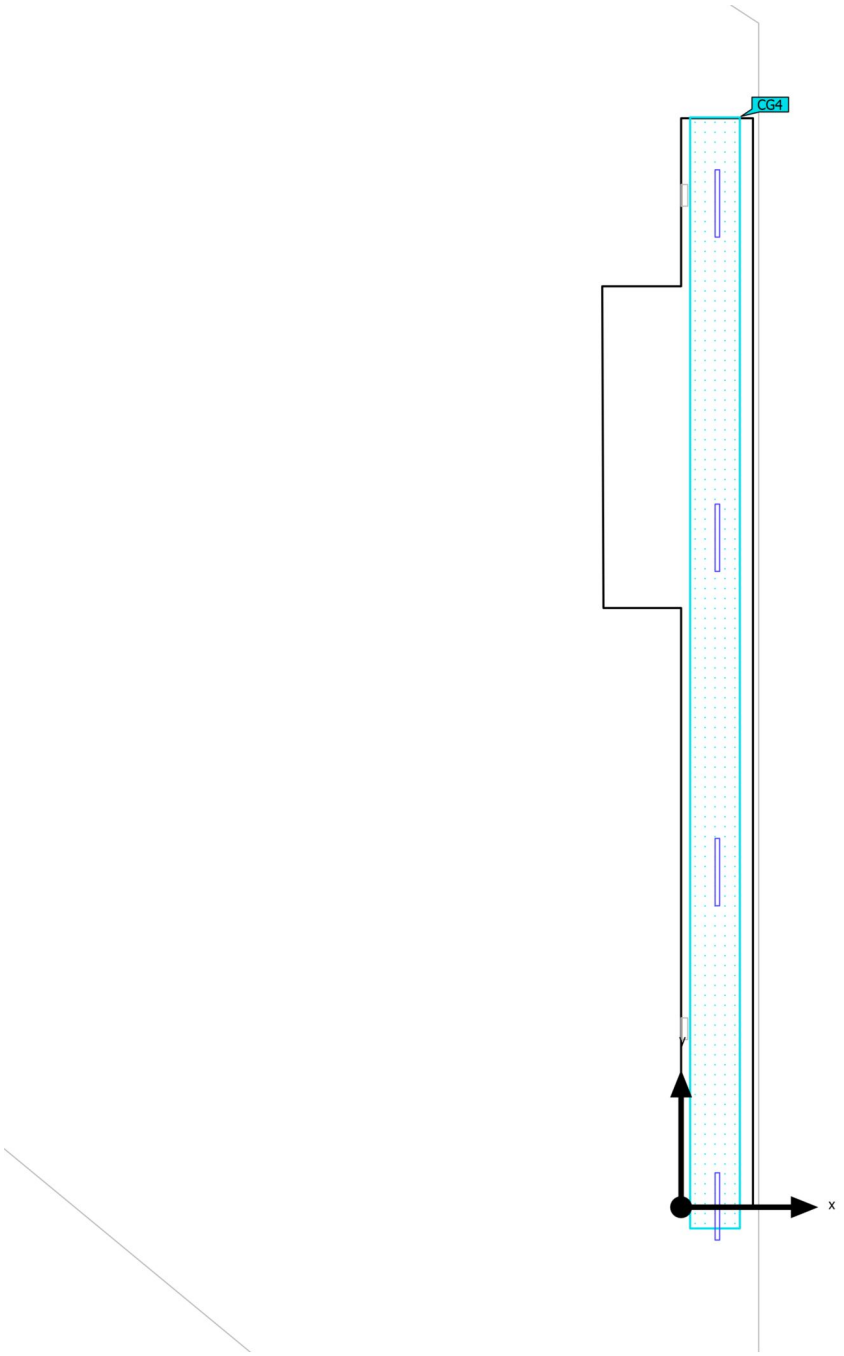
Manufacturer	SYLVANIA	$\Phi_{Luminaire}$	154 lm
Article name	SYLVANIA P23342-LED EMERG R1 2X1.6W	$\Phi_{Emergency\ lighting}$	154 lm
		ELF	100 %
Fitting	1x		

Individual luminaires

X	Y	Mounting height	Luminaire
0.060 m	3.229 m	3.000 m	5
0.060 m	18.305 m	3.000 m	6

Piso 1 · Storey 1 · Circulacion (Light scene 1)

Calculation objects



Piso 1 · Storey 1 · Circulacion (Light scene 1)

Calculation objects

Calculation surfaces

Properties	$\bar{E}$	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Circulacion 2 Perpendicular illuminance Height: 0.200 m	109 lx	68.5 lx	165 lx	0.63	0.42	CG4

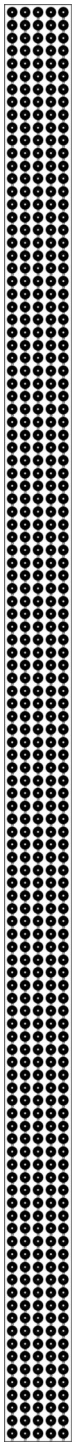
Circulacion 2 (UGR)

Strongest glare at	180°
max	23.7
Target	≤25.0
Viewing sector	0° - 360°
Step width	15°
Height	0.200 m
Index	CG4

Piso 1 · Storey 1 · Circulacion (Light scene 1)

Calculation objects

Circulacion 2 (UGR)



Piso 1 · Storey 1 · Circulacion (Light scene 1)

Calculation objects

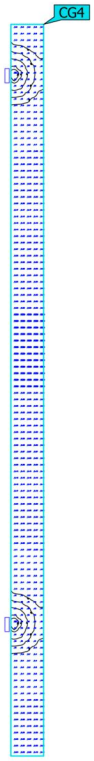
(1) Based on a rectangular space of 2.727 m x 19.700 m and SHR of 0.25.

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Circulacion (Emergency light scene)

Circulacion 2





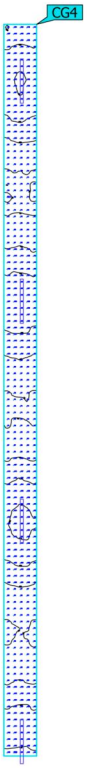
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Circulacion 2 Perpendicular illuminance Height: 0.200 m	5.82 lx	0.021 lx	85.9 lx	0.004	0.000	CG4

Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Piso 1 · Storey 1 · Circulacion (Light scene 1)

Circulacion 2



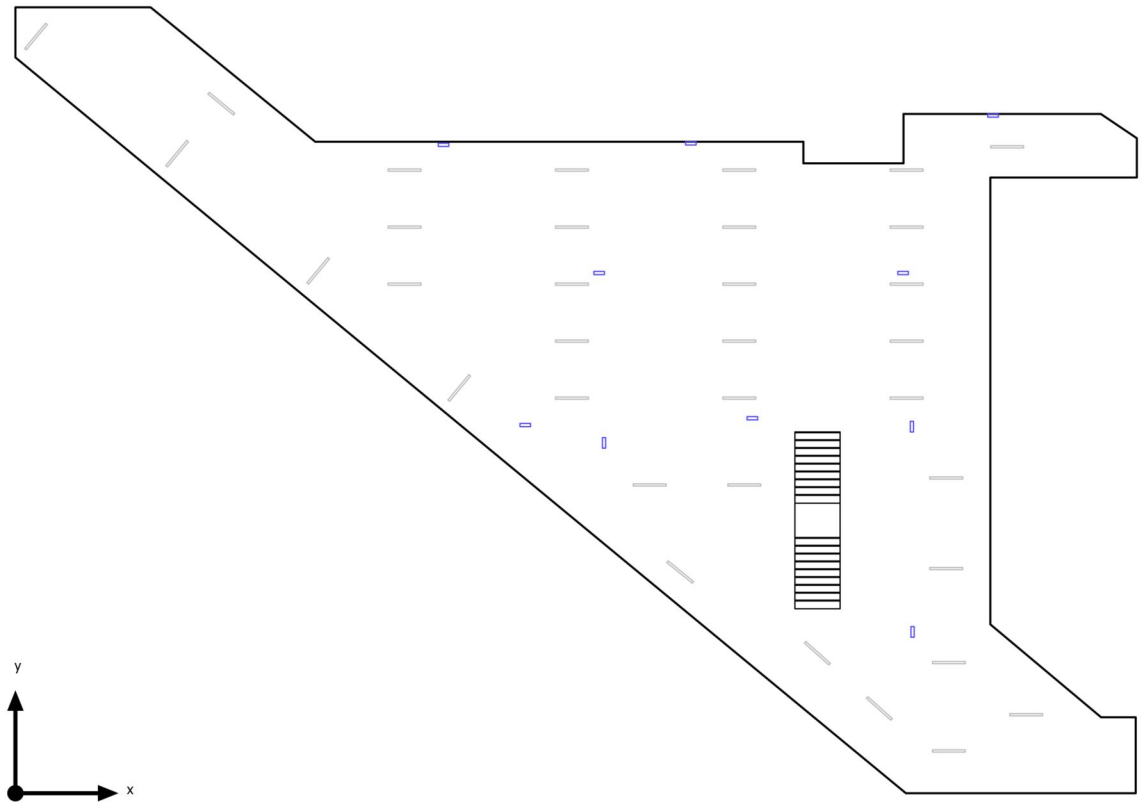


Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Circulacion 2 Perpendicular illuminance Height: 0.200 m	109 lx	68.5 lx	165 lx	0.63	0.42	CG4

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Room 1 (Emergency light scene)

Summary



Ground area	496.37 m²
Reflection factors	Ceiling: 70.0 %, Walls: 50.2 %, Floor: 20.2 %
Maintenance factor	0.80 (fixed)

Clearance height	3.000 m
Mounting height	2.200 m – 3.000 m

Piso 1 · Storey 1 · Room 1 (Emergency light scene)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Room	Lighting power density	0.00 W/m²	–		

(2) Calculated using DIN:18599-4.

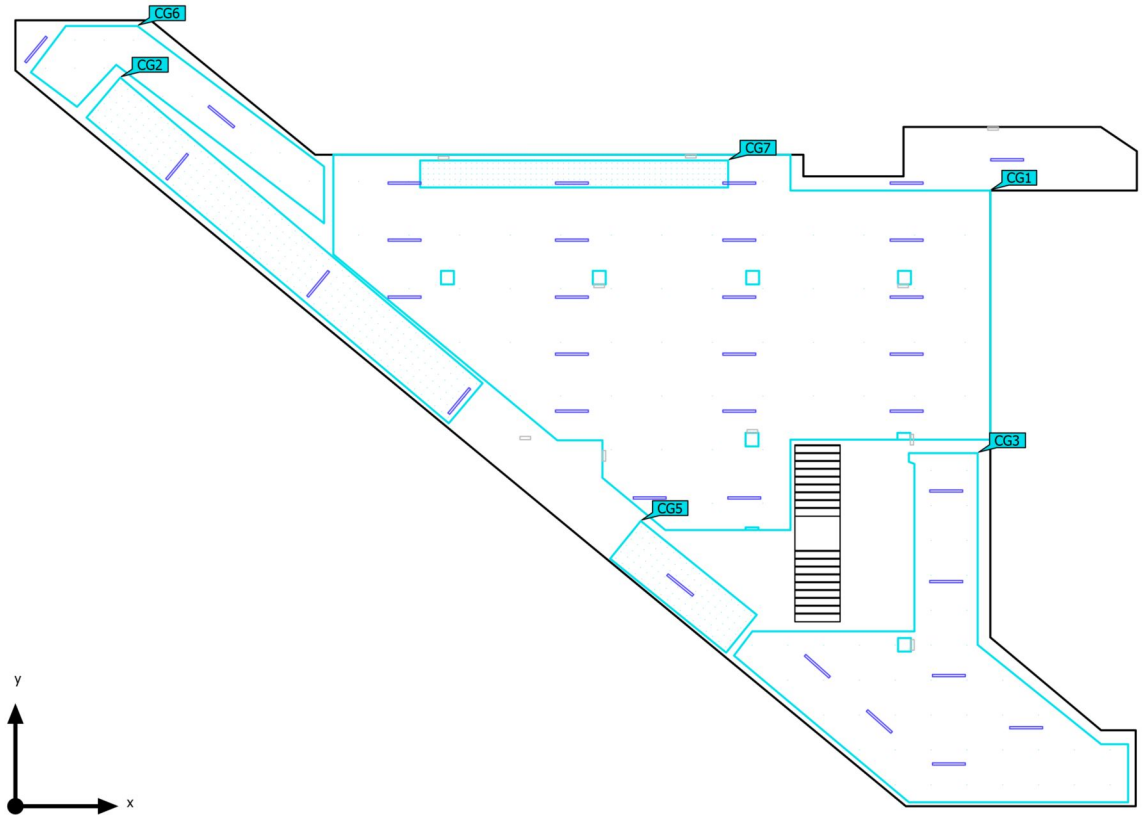
Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Luminaire list

pcs.	Manufacturer	Article No.	Article name	Φ	Luminous efficacy
10	SYLVANIA		SYLVANIA P23342-LED EMERG R1 2X1.6W	154 lm	∞ lm/W
				154 lm (100 %)	-

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Summary



Ground area	496.37 m²
Reflection factors	Ceiling: 70.0 %, Walls: 50.2 %, Floor: 20.2 %
Maintenance factor	0.80 (fixed)

Clearance height	3.000 m
Mounting height	2.900 m – 3.000 m

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Summary

Results

	Symbol	Calculated	Target	Check	Index
Energy estimation(2)	Consumption	1373 kWh/a	max. 17400 kWh/a	✓	
Room	Lighting power density	2.51 W/m²	–		

(1) Based on a rectangular space of 29.104 m x 41.509 m and SHR of 0.25.
(2) Calculated using DIN:18599-4.

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Luminaire list

pcs.	Manufacturer	Article No.	Article name	R_{UG}	P	Φ	Luminous efficacy
34	Not yet a DIALux member	HERMÉTICA LRL10036BL	HERMÉTICA LRL10036BL-36W	–	36.7 W	3437 lm	93.6 lm/W

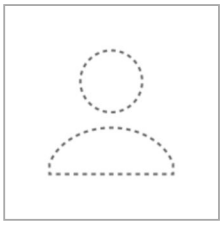
Piso 1 · Storey 1 · Room 1

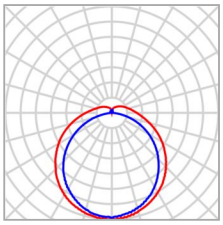
Luminaire layout plan



Piso 1 · Storey 1 · Room 1

Luminaire layout plan





Manufacturer	Not yet a DIALux member
Article No.	HERMÉTICA LRL10036BL
Article name	HERMÉTICA LRL10036BL-36W
Fitting	1x

P	36.7 W
$\Phi_{Luminaire}$	3437 lm

18 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	20.598 m / 14.631 m / 2.900 m
X-direction	4 pcs., Centre - centre, 6.195 m
Y-direction	5 pcs., Centre - centre, 2.111 m
Arrangement	A1

X	Y	Mounting height	Luminaire
20.598 m	14.631 m	2.900 m	1
26.793 m	14.631 m	2.900 m	2
20.598 m	16.742 m	2.900 m	3
26.793 m	16.742 m	2.900 m	4
20.598 m	18.853 m	2.900 m	5
26.793 m	18.853 m	2.900 m	6
14.403 m	20.964 m	2.900 m	7
20.598 m	20.964 m	2.900 m	8
26.793 m	20.964 m	2.900 m	9
32.988 m	14.631 m	2.900 m	10
32.988 m	16.742 m	2.900 m	11
32.988 m	18.853 m	2.900 m	12
32.988 m	20.964 m	2.900 m	13

Piso 1 · Storey 1 · Room 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
14.403 m	23.075 m	2.900 m	14
20.598 m	23.075 m	2.900 m	15
26.793 m	23.075 m	2.900 m	16
32.988 m	23.075 m	2.900 m	17
14.403 m	18.853 m	2.900 m	21

4 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	5.983 m / 23.684 m / 3.000 m
X-direction	4 pcs., Centre - centre, 6.789 m
Y-direction	1 pcs., Centre - centre, 2.395 m
Arrangement	A2

X	Y	Mounting height	Luminaire
5.983 m	23.684 m	3.000 m	18
11.205 m	19.345 m	3.000 m	19
16.428 m	15.007 m	3.000 m	20
0.760 m	28.022 m	3.000 m	33

1 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	7.622 m / 25.535 m / 3.000 m
X-direction	1 pcs., Centre - centre, 7.850 m
Y-direction	1 pcs., Centre - centre, 2.527 m
Arrangement	A3

X	Y	Mounting height	Luminaire
7.622 m	25.535 m	3.000 m	22

2 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Piso 1 · Storey 1 · Room 1

Luminaire layout plan

Type	Field Arrangement
1st luminaire (X/Y/Z)	34.452 m / 8.318 m / 3.000 m
X-direction	1 pcs., Centre - centre, 3.268 m
Y-direction	2 pcs., Centre - centre, 3.354 m
Arrangement	A4

X	Y	Mounting height	Luminaire
34.452 m	8.318 m	3.000 m	23
34.452 m	11.673 m	3.000 m	24

1 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	24.607 m / 8.190 m / 3.000 m
X-direction	1 pcs., Centre - centre, 5.800 m
Y-direction	1 pcs., Centre - centre, 2.250 m
Arrangement	A5

X	Y	Mounting height	Luminaire
24.607 m	8.190 m	3.000 m	25

2 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	23.477 m / 11.415 m / 3.000 m
X-direction	2 pcs., Centre - centre, 3.500 m
Y-direction	1 pcs., Centre - centre, 4.270 m
Arrangement	A6

X	Y	Mounting height	Luminaire
23.477 m	11.415 m	3.000 m	26
26.978 m	11.415 m	3.000 m	27

2 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Piso 1 · Storey 1 · Room 1

Luminaire layout plan

Type	Field Arrangement
1st luminaire (X/Y/Z)	34.552 m / 1.563 m / 3.000 m
X-direction	1 pcs., Centre - centre, 3.308 m
Y-direction	2 pcs., Centre - centre, 3.275 m
Arrangement	A7

X	Y	Mounting height	Luminaire
34.552 m	1.563 m	3.000 m	28
34.552 m	4.838 m	3.000 m	29

2 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	29.683 m / 5.185 m / 3.000 m
X-direction	2 pcs., Centre - centre, 3.075 m
Y-direction	1 pcs., Centre - centre, 4.146 m
Arrangement	A8

X	Y	Mounting height	Luminaire
29.683 m	5.185 m	3.000 m	30
31.978 m	3.138 m	3.000 m	31

1 x Not yet a DIALux member HERMÉTICA LRL10036BL-36W

Type	Field Arrangement
1st luminaire (X/Y/Z)	36.708 m / 23.938 m / 3.000 m
X-direction	1 pcs., Centre - centre, 7.450 m
Y-direction	1 pcs., Centre - centre, 2.275 m
Arrangement	A9

X	Y	Mounting height	Luminaire
36.708 m	23.938 m	3.000 m	32

Individual luminaires

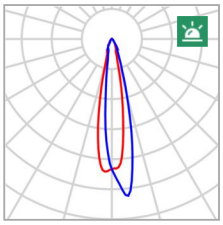
Piso 1 · Storey 1 · Room 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
37.412 m	2.906 m	3.000 m	34

Piso 1 · Storey 1 · Room 1

Luminaire layout plan



Manufacturer	SYLVANIA	$\Phi_{Luminaire}$	154 lm
Article name	SYLVANIA P23342-LED EMERG R1 2X1.6W	$\Phi_{Emergency\ lighting}$	154 lm
		ELF	100 %
Fitting	1x		

Individual luminaires

X	Y	Mounting height	Luminaire
15.846 m	24.011 m	2.200 m	35
25.000 m	24.066 m	2.200 m	36
36.187 m	25.095 m	2.200 m	37
21.606 m	19.265 m	2.200 m	38
32.858 m	19.265 m	2.200 m	39
21.787 m	12.973 m	3.000 m	40
33.207 m	5.973 m	3.000 m	41
33.184 m	13.575 m	3.000 m	42
18.872 m	13.635 m	2.200 m	43
27.277 m	13.885 m	2.200 m	44

Piso 1 · Storey 1 · Room 1

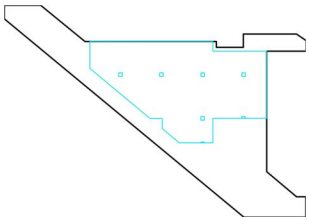
Luminaire list

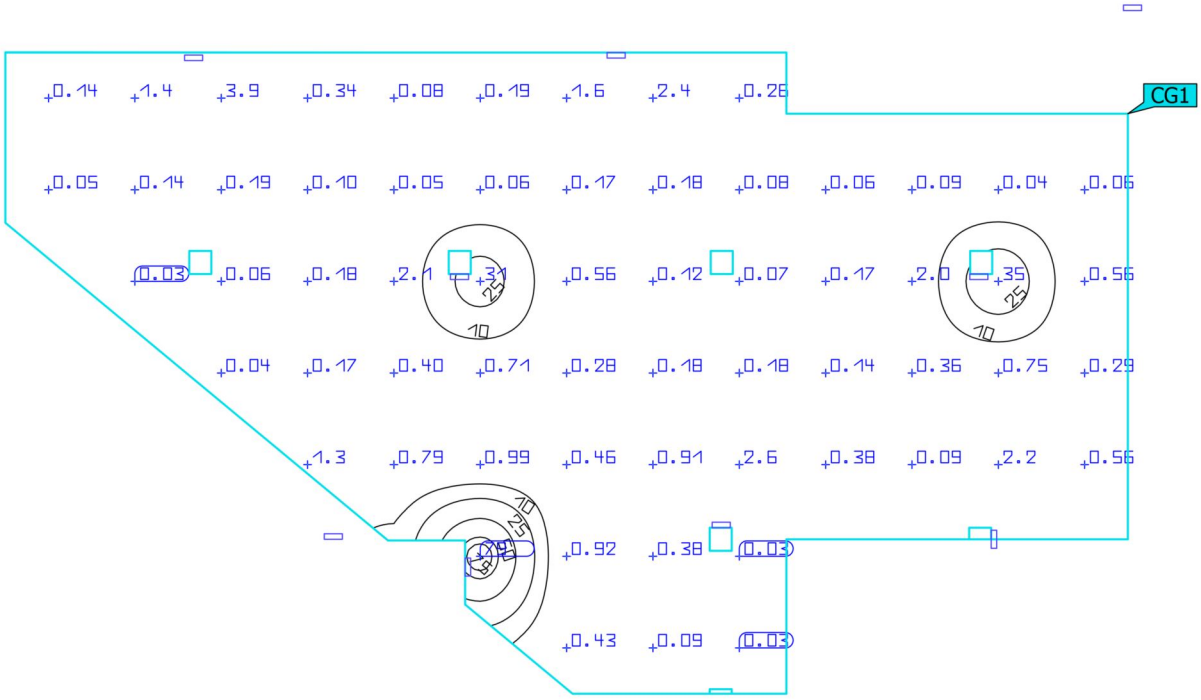
Φ_{total}	P_{total}	Luminous efficacy	$\Phi_{Emergency\ lighting}$
118398 lm	1247.8 W	94.9 lm/W	1540 lm

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
34	Not yet a DIALux member	HERMÉTICA LRL10036 BL	HERMÉTICA LRL10036BL-36W		3437 lm	93.6 lm/W
10	SYLVANIA		SYLVANIA P23342-LED EMERG R1 2X1.6W		154 lm	∞ lm/W
					154 lm (100 %)	-

Piso 1 · Storey 1 · Room 1 (Emergency light scene)

Zona de mesas



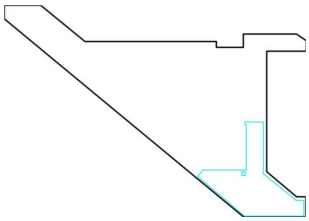


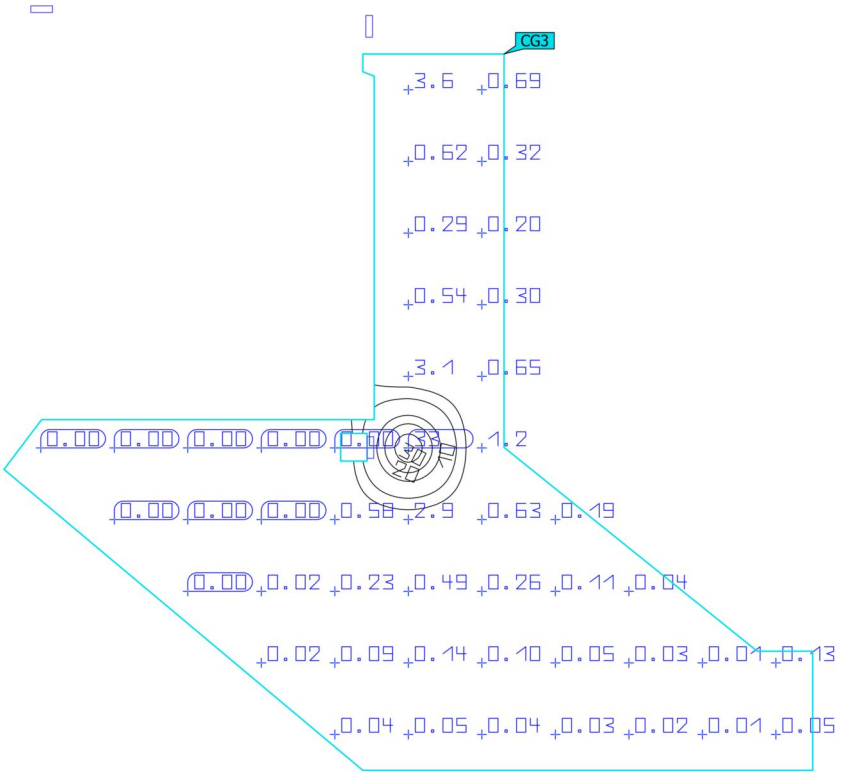
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Zona de mesas Perpendicular illuminance Height: 0.200 m	2.87 lx	0.026 lx	79.0 lx	0.009	0.000	CG1

Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Piso 1 · Storey 1 · Room 1 (Emergency light scene)

Circulacion entrada



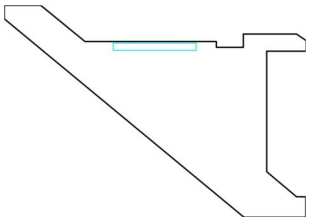


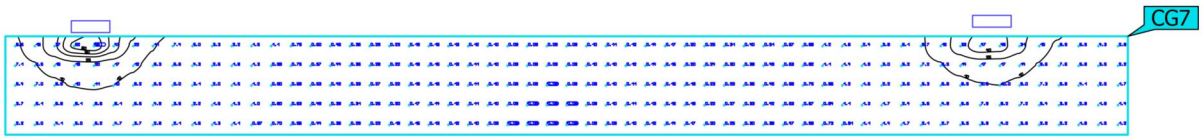
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Circulacion entrada Perpendicular illuminance Height: 0.200 m	1.10 lx	0.000 lx	33.0 lx	0.00	0.00	CG3

Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Piso 1 · Storey 1 · Room 1 (Emergency light scene)

emergencia 1



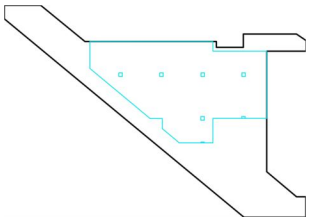


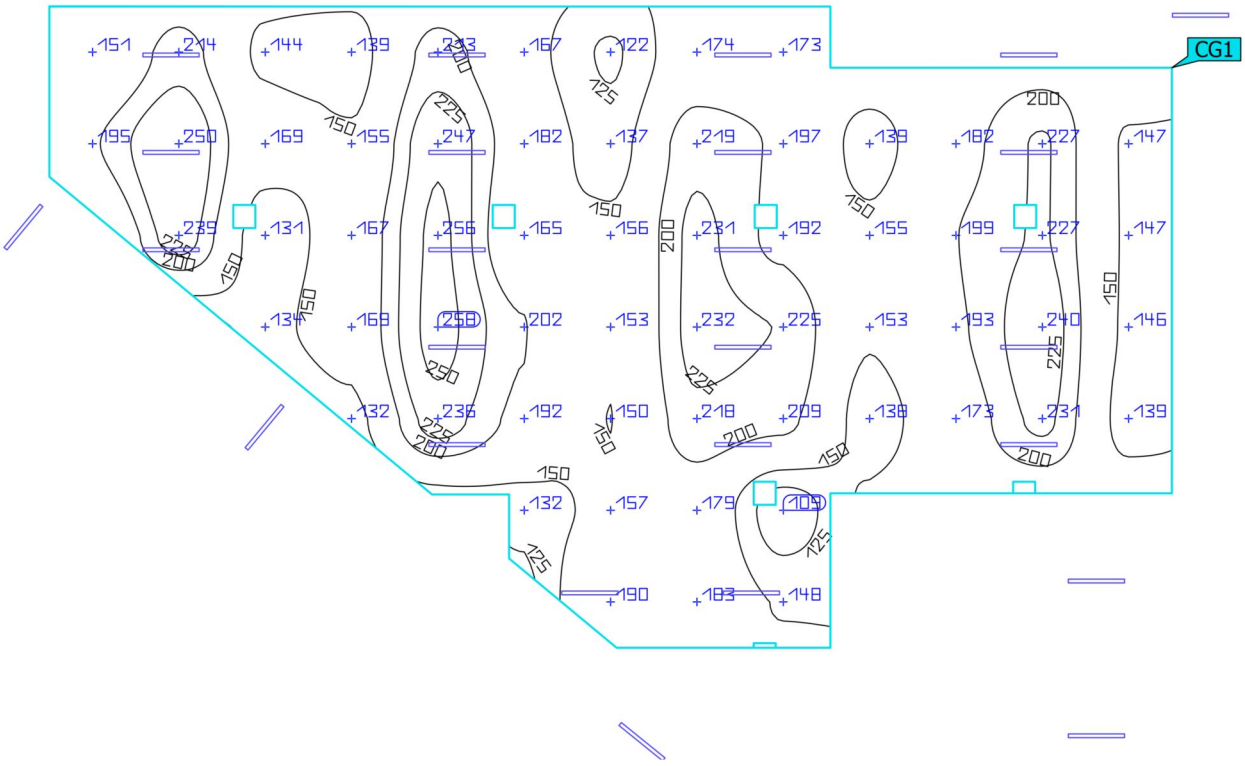
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
emergencia 1 Perpendicular illuminance Height: 0.100 m	4.07 lx	0.080 lx	66.4 lx	0.020	0.001	CG7

Notes on planning:
The emergency lighting scene was calculated without reflection and without taking into account the placed furniture.

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Zona de mesas



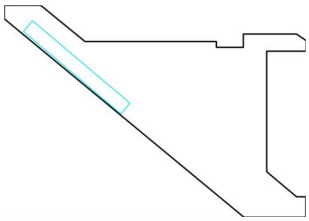


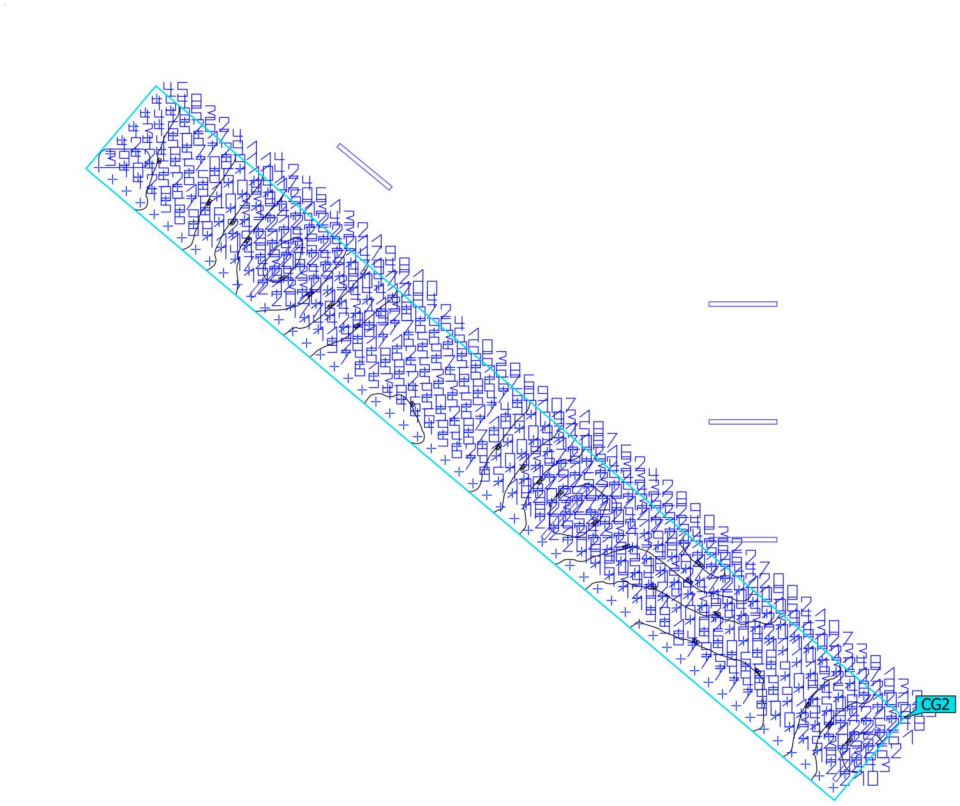
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Zona de mesas Perpendicular illuminance Height: 0.200 m	181 lx	109 lx	258 lx	0.60	0.42	CG1

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Gradas



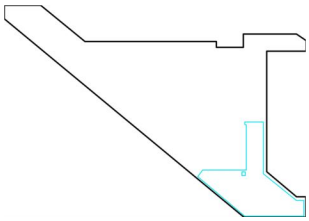


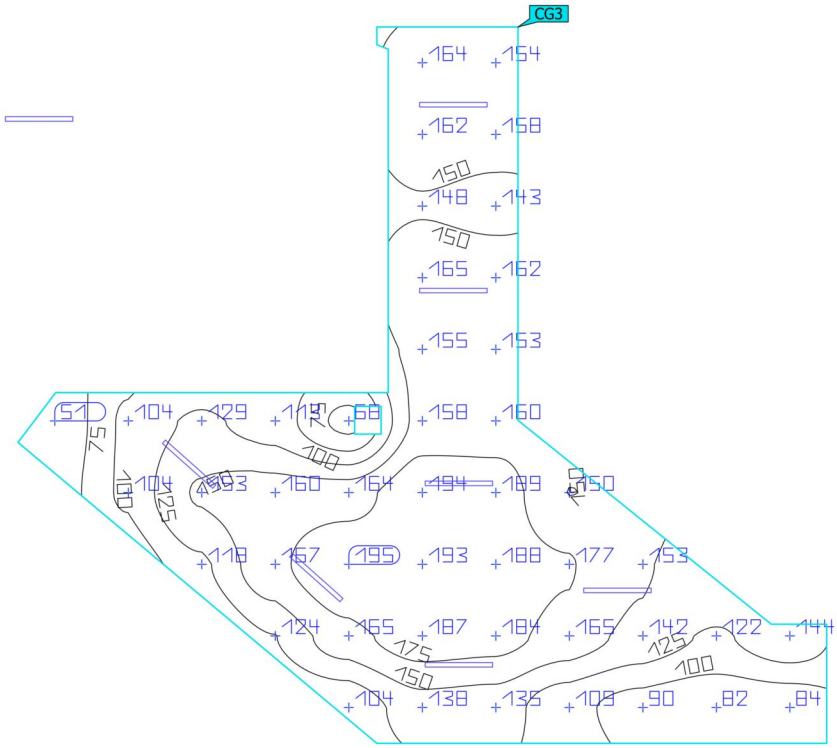
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Gradas Perpendicular illuminance Height: 1.100 m	140 lx	39.3 lx	271 lx	0.28	0.15	CG2

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Circulacion entrada



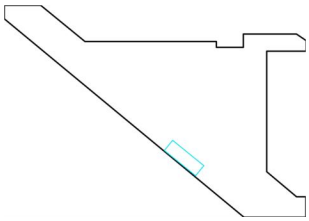


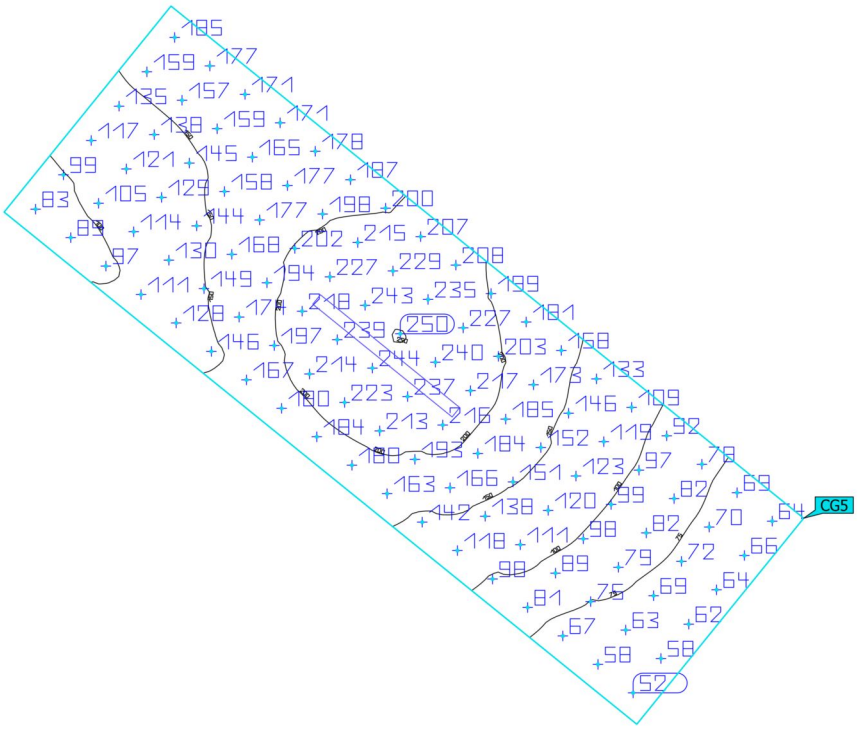
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Circulacion entrada Perpendicular illuminance Height: 0.200 m	144 lx	51.2 lx	195 lx	0.36	0.26	CG3

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Room 1 (Light scene 1)

Gradas 2



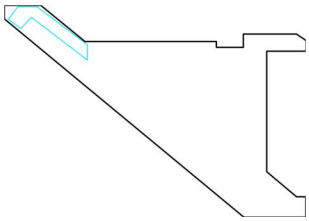


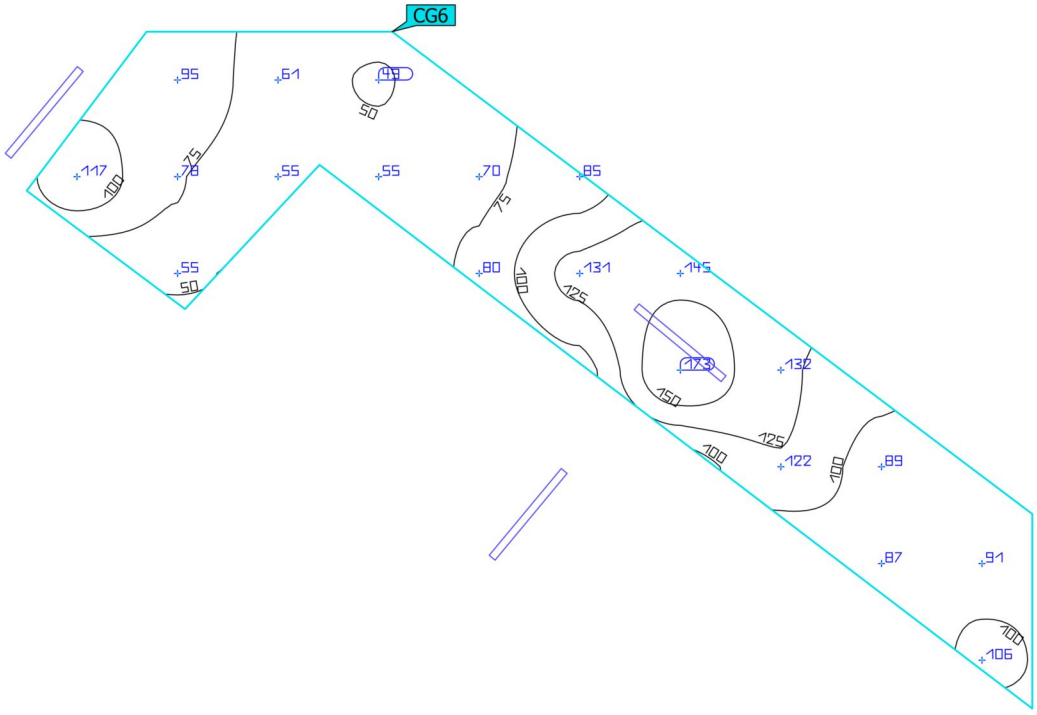
Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
Gradas 2 Perpendicular illuminance Height: 1.100 m	148 lx	51.8 lx	250 lx	0.35	0.21	CG5

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)

Piso 1 · Storey 1 · Room 1 (Light scene 1)

CIrculacion 2





Properties	Ē	E_{min}	E_{max}	U_o (g_1)	g_2	Index
CIrculacion 2 Perpendicular illuminance Height: 0.200 m	93.7 lx	48.8 lx	173 lx	0.52	0.28	CG6

Utilisation profile: Traffic zones inside buildings (5.1.2 Stairs, escalators, travelators)