Installation : Co-Op Market Street

Project number :
Customer :
Processed by : Signify
Date : 22.04.2025

Project description:
Maintenance Factor 0.80

The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

EMERGENCY LIGHTING NOTES:

· Locations of fire fighting equipments/Manual call points _FAP taken from the CAD drawing (unless survey provided). All points of emphasis (POE) mounting heights and their sizes have been assumed.
· Obstructions not considered in the POE lighting levels calculations.
· All emergency downlighters to be orientated as indicated on the drawing with arrows.
· All Emergency exit signs to be suspended/mounted between 2m-2.5mtrs.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

Table of contents

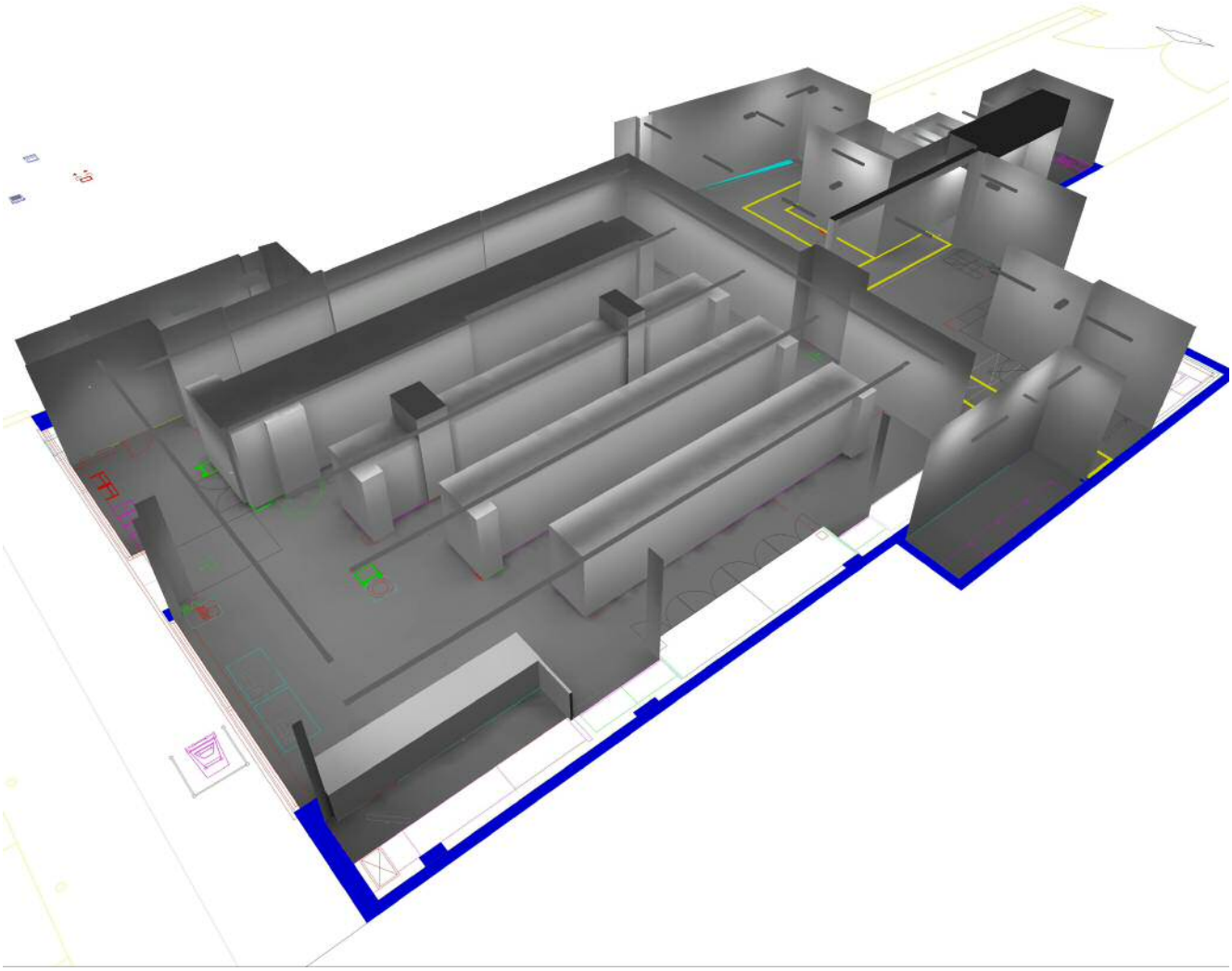
First Page 1
Table of contents 2
Description, Floor 1
.1 Floor 3D 4
Summary, Floor 1
.2 Floor overview 5
1 Sales Floor
1.1 Summary, Sales Floor
1.1.1 Result overview, Evaluation area 1 10
1.2 Calculation results, Sales Floor
1.2.1 Pseudo colours, Reference plane 1.1 (E) 12
1.2.2 3D luminance, View 1 13
1.2.3 3D pseudo colours, View 1 (E) 14
1.3 Summary, Sales Floor
1.3.1.1 Result overview (emergency lighting) 15
2 Secure Store
2.1 Summary, Secure Store
2.1.1 Result overview, Evaluation area 1 17
2.2 Summary, Secure Store
2.2.1.1 Result overview (emergency lighting) 19
3 Warehouse
3.1 Summary, Warehouse
3.1.1 Result overview, Evaluation area 1 20
3.2 Summary, Warehouse
3.2.1.1 Result overview (emergency lighting) 22
3.2 Calculation results, Warehouse
3.2.2 Table, DB (E) 24
4 Bakery
4.1 Summary, Bakery
4.1.1 Result overview, Evaluation area 1 25
4.2 Summary, Bakery
4.2.1.1 Result overview (emergency lighting) 27
5 WC
5.1 Summary, WC
5.1.1 Result overview, Reference plane 1 28
5.2 Summary, WC
5.2.1.1 Result overview (emergency lighting) 29
6 WC Lobby
6.1 Summary, WC Lobby
6.1.1 Result overview, Evaluation area 1 30
6.2 Summary, WC Lobby
6.2.1.1 Result overview (emergency lighting) 32
7 Staff Room
7.1 Summary, Staff Room
7.1.1 Result overview, Evaluation area 1 33
7.2 Summary, Staff Room
7.2.1.1 Result overview (emergency lighting) 35
8 Office
8.1 Summary, Office
8.1.1 Result overview, Evaluation area 1 36
8.2 Summary, Office
8.2.1.1 Result overview (emergency lighting) 38

Table of contents

1 Exterior 1
1.1 Description, Exterior 1
1.1.1 Floor plan 39
1.2 Summary, Exterior 1
1.2.1 Result overview, Yard 40
1.2.2 Result overview, Assumed Plant location 42
1.3 Calculation results, Exterior 1
1.3.1 Pseudo colours, Yard (E) 44
1.3.2 3D luminance, View 1 45
1.3.3 3D luminance, View 2 46
1.3.4 3D pseudo colours, View 1 (E) 47
1.3.5 3D pseudo colours, View 2 (E) 48
1.4 Summary, Exterior 1
1.4.1.1 Result overview (emergency lighting) 49
1.4 Calculation results, Exterior 1
1.4.2 Boundary line, Yard (E) 51

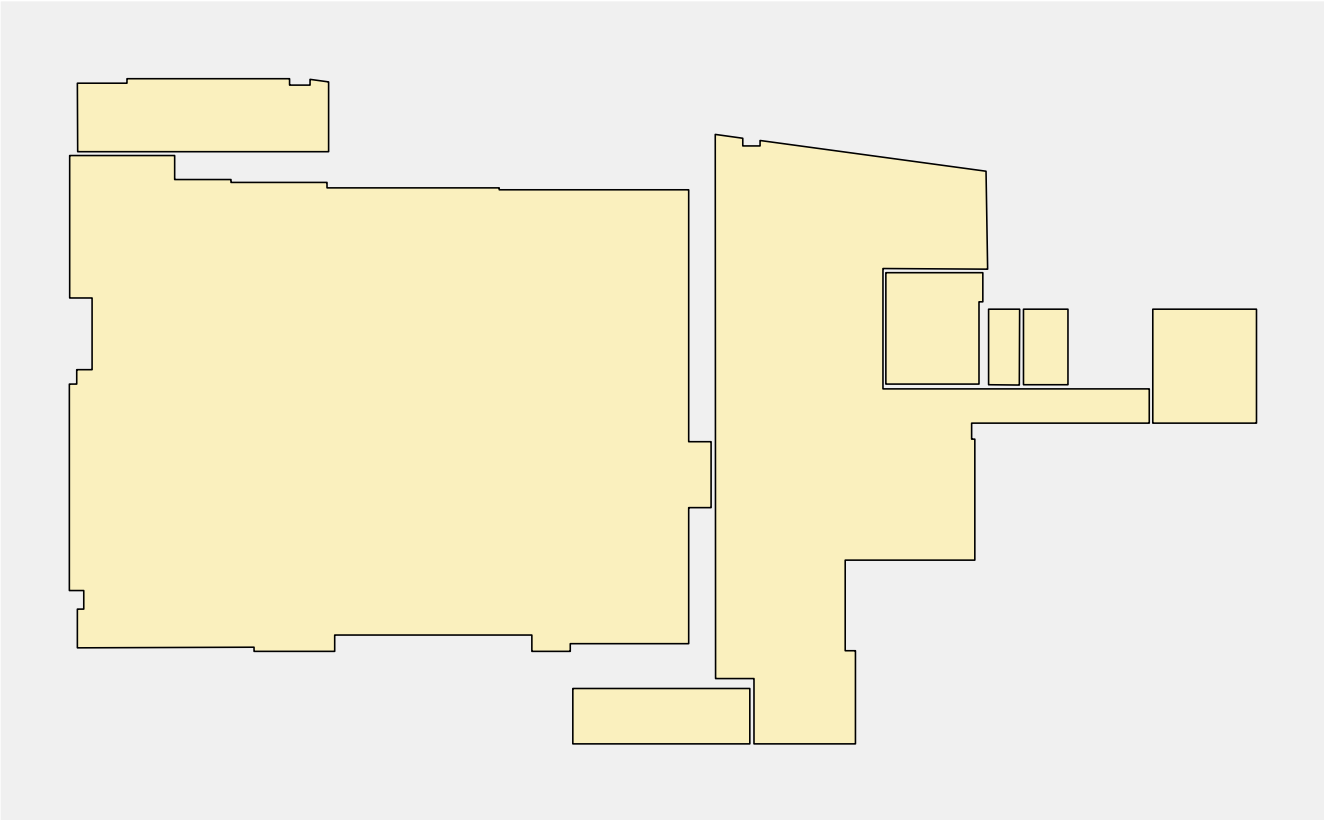
Description, Floor 1

.1 Floor 3D



Summary, Floor 1

.2 Floor overview



Number of rooms	8
Total area	315.0 m²
Total volume	911.4 m³
Number of luminaires	89
Total luminous flux	304200 lm
Total power	2012 W
Total power per area	6.38 W/m²

Calculated

Parts list

Type No.\Make

		Philips Lighting	
10	14 x	Order No.	: !BN126C LED41S/840 PSD L1200
		Luminaire name	: A1D
		Equipment	: 1 x LED41S/840 34 W / 4100 lm
15	1 x	Order No.	: !WT120C G2 L1500 1 xLED60S/840
		Luminaire name	: B4D
		Equipment	: 1 x LED60S/840 43 W / 6000 lm
16	4 x	Order No.	: !BN126C LED25S/840 PSU L1200
		Luminaire name	: A3D
		Equipment	: 1 x LED25S/840 18 W / 2500 lm

Summary, Floor 1

.2 Floor overview

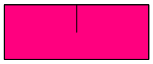
17 1 x
Order No. : !BN126C LED35S/840 PSU L1500
Luminaire name : A2D
Equipment : 1 x LED35S/840 25.5 W / 3500 lm

18 3 x 
Order No. : !RC136B PSD W60L60 1 x31S_37S_43S/840 OC
Luminaire name : B12D
Equipment : 1 x 31S_37S_43S/840 22 W / 3100 lm

19 23 x
Order No. : !CoreLineTrunking LL234X 90S/840 1x PSD WB
Luminaire name : A1/3.4/WB
Equipment : 1 x LED90S/840 55 W / 9000 lm

20 3 x
Order No. : !CoreLineTrunking LL217X LED45S/840 PSD WB.
Luminaire name : A2/1.7/WB
Equipment : 1 x LED45S/840 27.5 W / 4500 lm

LIAL Eulumdat

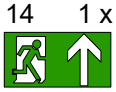
3 7E x 
Order No. : !SM BKD LED9S/840 PSD L370 NM3 ELD -- Emergency Lighting --
Luminaire name : B6D
Equipment : 1 x OLP 2 EMERGENCY 4.7 W / 590 lm (0%)
Emergency : 590 lm

7 7 x 
Order No. : !CoreLineTrunking Starter Kit -- Emergency Lighting --
Luminaire name : ST
Equipment : 1 x 0.5 W / 0.001 lm (0%)
Emergency : 0.001 lm

8 3E x 
Order No. : !919013004995 PROF REC SPOT LED2S OA NM3 ELD IP20 -- Emergency Light
Luminaire name : E4D OA
Equipment : 1 x 2 W / 240 lm (0%)
Emergency : 240 lm

9 7E x 
Order No. : !919013004995 PROF REC SPOT LED2S CO NM3 ELD IP20 -- Emergency Light
Luminaire name : E4D COR
Equipment : 1 x 2 W / 222 lm (0%)
Emergency : 222 lm

11 6E x 
Order No. : !919013004998 PROF SM BKD LED2S M3 ELD IP65 -- Emergency Lighting --
Luminaire name : ED6
Equipment : 1 x 2 W / 223 lm (0%)
Emergency : 223 lm

14 1 x 
Order No. : !EM WL EXIT SIGN 30M M3 ELD ISO UP -- Emergency Lighting --
Luminaire name : E8D-U
Equipment : 1 x PROF EM WL EXIT SIGN 30M M3 ELD ISO UP / 50 lm (0%)
Emergency : 50 lm

21 2E x 
Order No. : !919013004997 PROF SM SPOT LED4S CO NM3 ELD IP65 -- Emergency Lightir
Luminaire name : E9D-H COR
Equipment : 1 x 3 W / 438 lm (0%)
Emergency : 438 lm

Summary, Floor 1

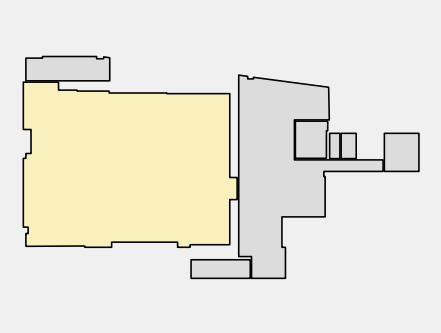
.2 Floor overview

23 7 x 

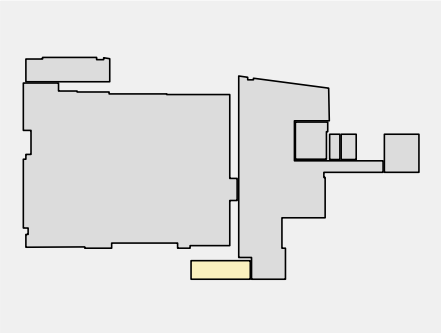
Order No. : ! EM BLADE SIGN WLCM 30M M3 ELD UP -- Emergency Lighting --
Luminaire name : E15D-U
Equipment : 1 x 1 W / 19 lm (0%)
Emergency : 19 lm

Rooms

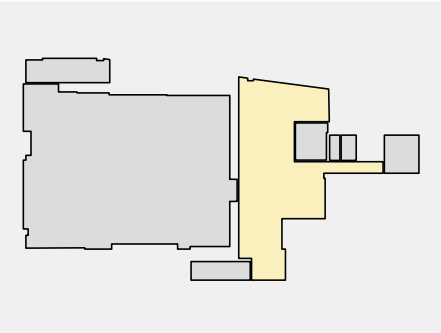
Sales Floor	51 x Luminaires
Floor area	193.4 m²
Wall area (without windows)	178.6 m²
Window area	0.0 m²
Volume	560.9 m³
Total luminous flux	220500 lm
Total power	1347.5 W
Total power per area (193 m²)	6.97 W/m²
$\bar{E}_m$	913 lx
E_{min}	500 lx
$E_{min}/\bar{E}_m$ (U_o)	0.55



Secure Store	3 x Luminaires
Floor area	6.6 m²
Wall area (without windows)	37.0 m²
Window area	0.0 m²
Volume	20.2 m³
Total luminous flux	8200 lm
Total power	68 W
Total power per area (7 m²)	10.28 W/m²
$\bar{E}_m$	193 lx
E_{min}	157 lx
$E_{min}/\bar{E}_m$ (U_o)	0.82



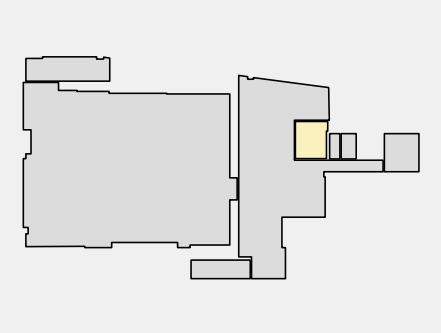
Warehouse	19 x Luminaires
Floor area	84.1 m²
Wall area (without windows)	183.2 m²
Window area	0.0 m²
Volume	257.4 m³
Total luminous flux	49200 lm
Total power	408 W
Total power per area (84 m²)	4.85 W/m²
$\bar{E}_m$	218 lx
E_{min}	109 lx
$E_{min}/\bar{E}_m$ (U_o)	0.50



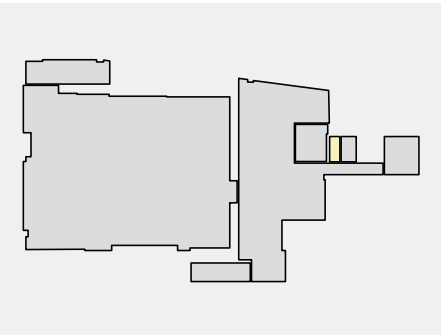
Summary, Floor 1

.2 Floor overview

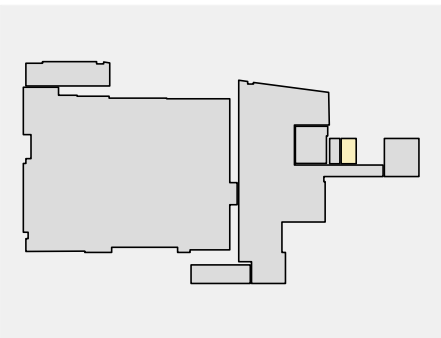
Bakery	2 x Luminaires
Floor area	7.1 m²
Wall area (without windows)	25.5 m²
Window area	0.0 m²
Volume	16.7 m³
Total luminous flux	6000 lm
Total power	43 W
Total power per area (7 m²)	6.04 W/m²
$\bar{E}_m$	497 lx
E_{min}	348 lx
$E_{min}/\bar{E}_m$ (U_o)	0.70



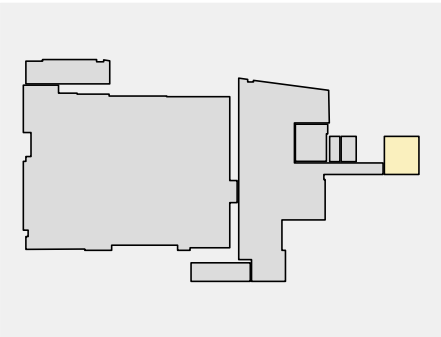
WC	4 x Luminaires
Floor area	1.6 m²
Wall area (without windows)	12.5 m²
Window area	0.0 m²
Volume	3.6 m³
Total luminous flux	5000 lm
Total power	36 W
Total power per area (2 m²)	22.72 W/m²
$\bar{E}_m$	---
E_{min}	---
$E_{min}/\bar{E}_m$ (U_o)	---



WC Lobby	4 x Luminaires
Floor area	2.3 m²
Wall area (without windows)	14.1 m²
Window area	0.0 m²
Volume	5.2 m³
Total luminous flux	2500 lm
Total power	18 W
Total power per area (2 m²)	7.89 W/m²
$\bar{E}_m$	175 lx
E_{min}	158 lx
$E_{min}/\bar{E}_m$ (U_o)	0.90



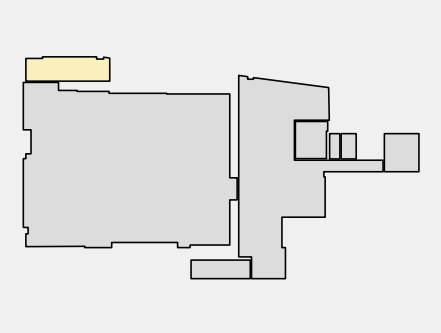
Staff Room	2 x Luminaires
Floor area	8.0 m²
Wall area (without windows)	25.8 m²
Window area	0.0 m²
Volume	18.3 m³
Total luminous flux	3500 lm
Total power	25.5 W
Total power per area (8 m²)	3.18 W/m²
$\bar{E}_m$	242 lx
E_{min}	142 lx
$E_{min}/\bar{E}_m$ (U_o)	0.59



Summary, Floor 1

.2 Floor overview

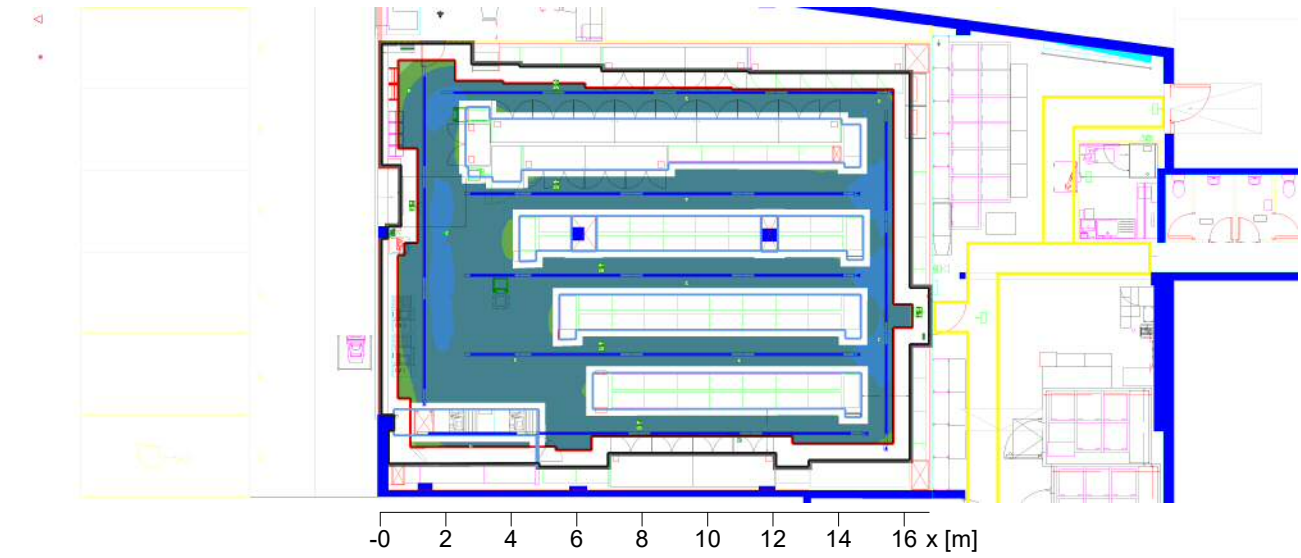
Office	4 x Luminaires
Floor area	12.1 m²
Wall area (without windows)	41.0 m²
Window area	0.0 m²
Volume	29.1 m³
Total luminous flux	9300 lm
Total power	66 W
Total power per area (12 m²)	5.44 W/m²
$\bar{E}_m$	511 lx
E_{min}	274 lx
$E_{min}/\bar{E}_m$ (U_o)	0.54



1 Sales Floor

1.1 Summary, Sales Floor

1.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total lamp luminous flux	220500 lm
Luminaire luminous flux	220425 lm
Total power	1347.5 W
Total power per area (193.40 m²)	6.97 W/m² (0.76 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	913 lx	324 lx
E_{min}	500 lx	206 lx
$E_{min}/\bar{E}_m$ (U_o)	0.55	0.64
E_{min}/E_{max} (U_d)	0.45	
E_z/E_h		0.31
Position	0.85 m	1.30 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

1 Sales Floor

1.1 Summary, Sales Floor

1.1.1 Result overview, Evaluation area 1

Philips Lighting

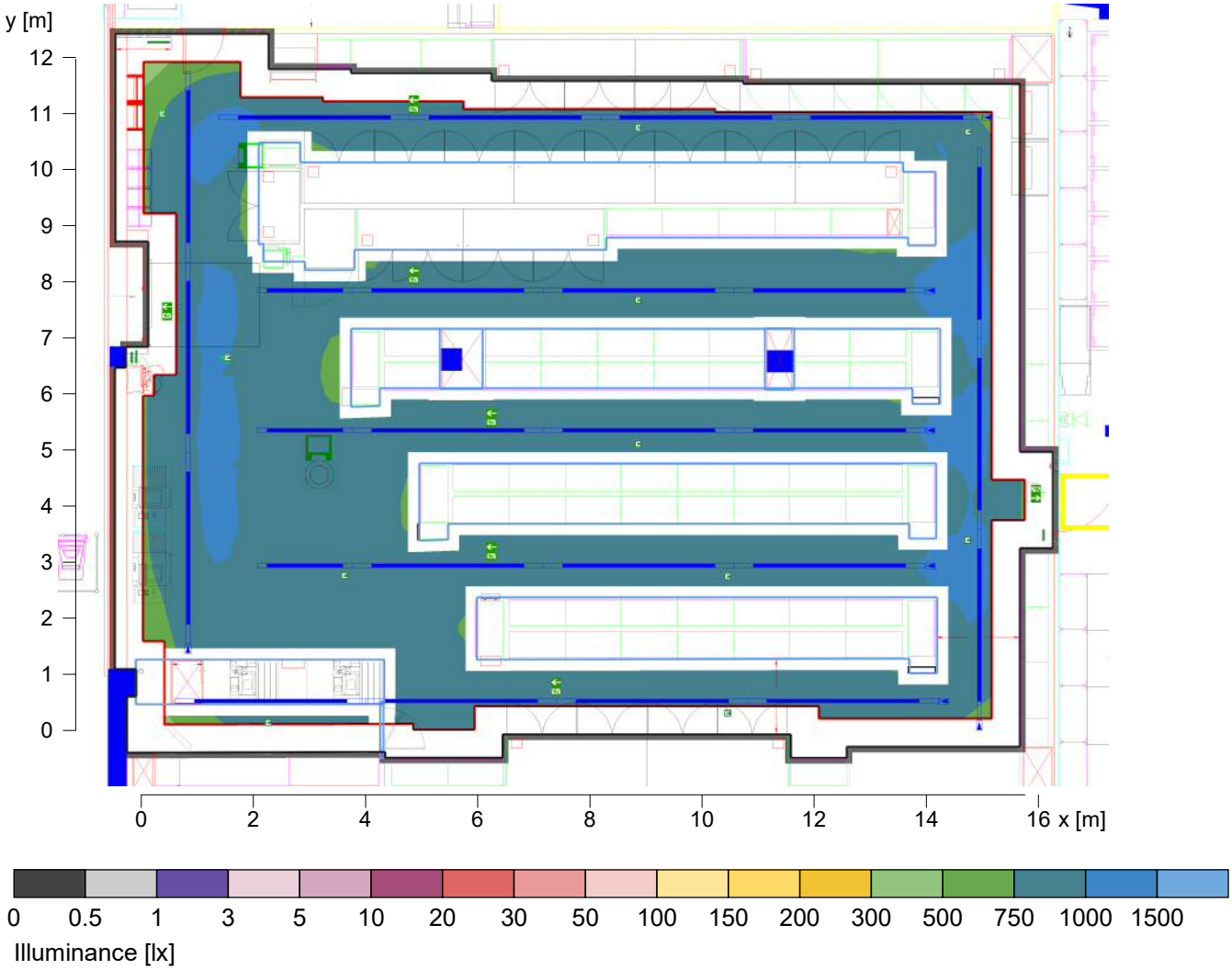
19 23 x
Order No. : !CoreLineTrunking LL234X 90S/840 1x PSD WB
Luminaire name : A1/3.4/WB
Equipment : 1 x LED90S/840 55 W / 9000 lm

20 3 x
Order No. : !CoreLineTrunking LL217X LED45S/840 PSD WB.
Luminaire name : A2/1.7/WB
Equipment : 1 x LED45S/840 27.5 W / 4500 lm

1 Sales Floor

1.2 Calculation results, Sales Floor

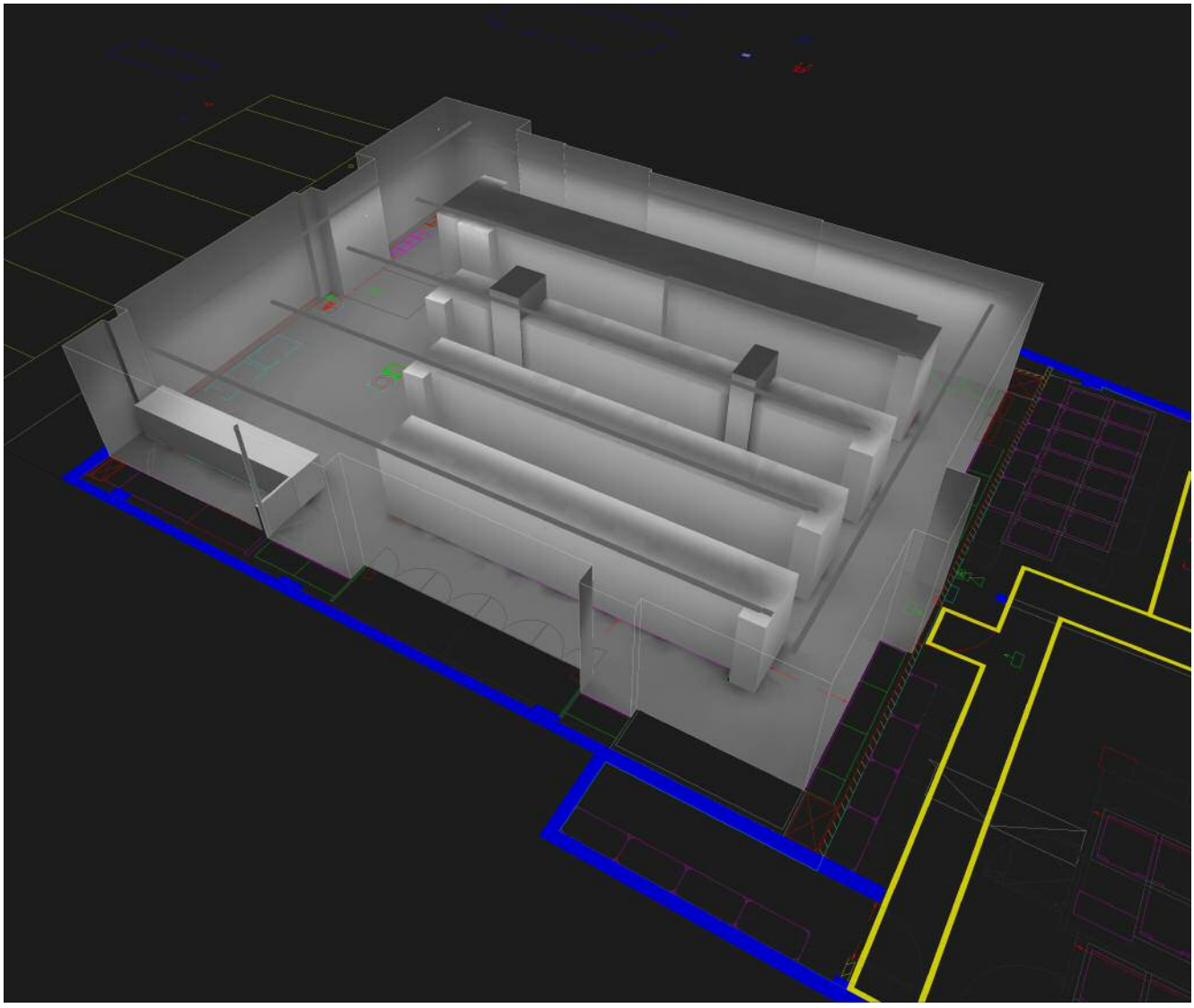
1.2.1 Pseudo colours, Reference plane 1.1 (E)



Height reference plane		: 0.85 m
Average illuminance	$\bar{E}_m$	: 913 lx
Minimum illuminance	E_{min}	: 500 lx
Maximum illuminance	E_{max}	: 1110 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 1.83 (0.55)

1.2 Calculation results, Sales Floor

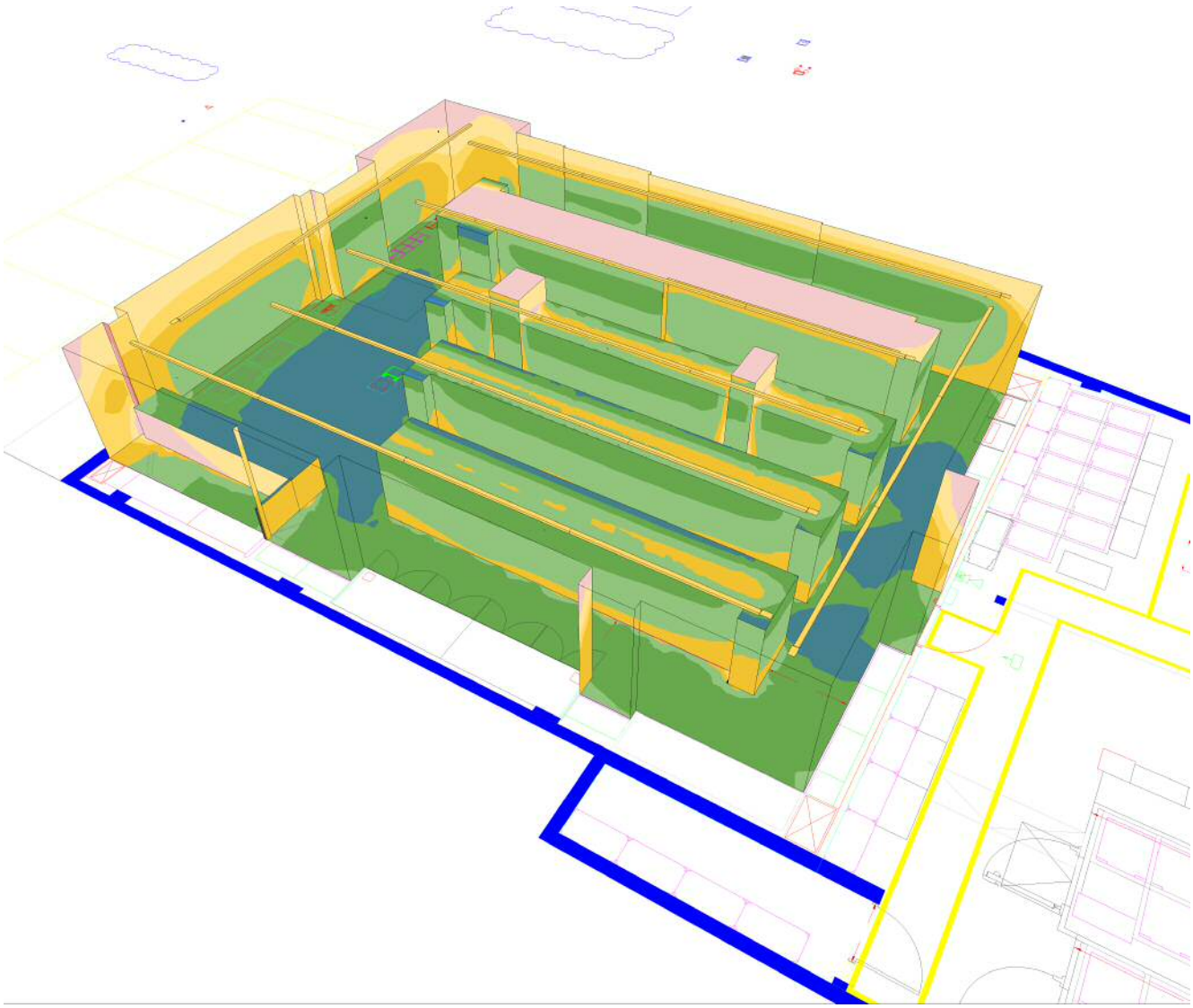
1.2.2 3D luminance, View 1

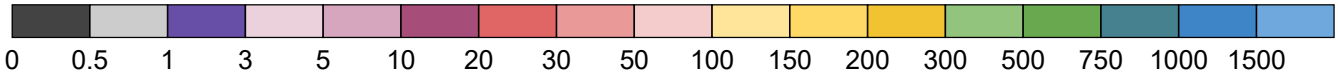


Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 205 cd/m²

1.2 Calculation results, Sales Floor

1.2.3 3D pseudo colours, View 1 (E)



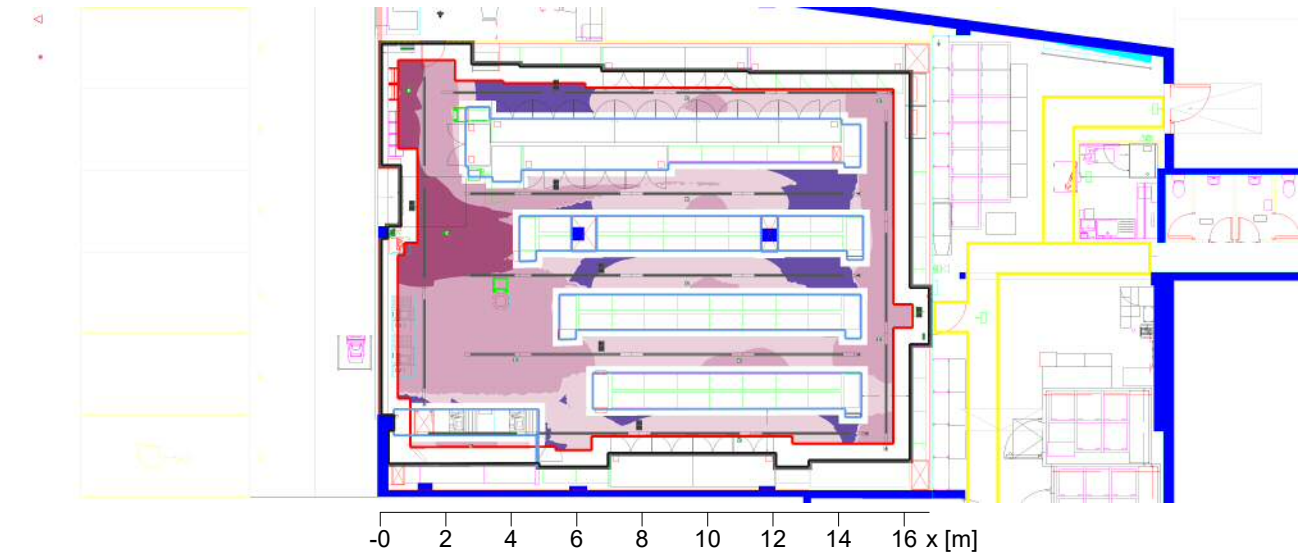


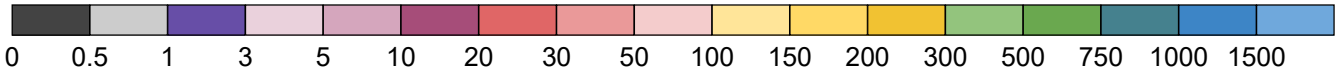
Illuminance [lx]

1 Sales Floor

1.3 Summary, Sales Floor

1.3.1.1 Result overview (emergency lighting)





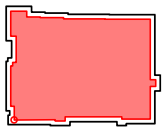
Illuminance [lx]

General

Calculation algorithm used	: Direct component
Maintenance factor	: 0.8
Height (phot.centre)	-variable-
Maximum I	: 630 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 15.72m x 11.92m (31 x 23 pts), Height = 0.00m			
1	1.18 lx	17.25 lx	1: 14.57
	>= 0.5 lx		>= 1 : 40



Places to highlight

No.	Emin [lx]	Surface Emax [lx]
1 Call Point Location 1		
Calculation field: 0.2m x 0.1m (2 x 2 pts)		
1	27.28 lx	31.60 lx
	>= 5 lx	



1 Sales Floor

1.3 Summary, Sales Floor

1.3.1.1 Result overview (emergency lighting)

2 Fire extinguishers Location 1
Calculation field: 0.23m x 0.4m (2 x 2 pts)

2	9.19 lx >= 5 lx	14.68 lx



3 FAP
Calculation field: 0.41m x 0.15m (2 x 2 pts)

3	21.88 lx >= 15 lx	31.41 lx



4 MAG Lock Break Glass
Calculation field: 0.2m x 0.1m (2 x 2 pts)

4	5.19 lx >= 5 lx	7.87 lx



Type No.\Make

8 2E x

Order No. : !919013004995 PROF REC SPOT LED2S OA NM3 ELD IP20 -- Emergency Light
Luminaire name : E4D OA
Equipment : 1 x 2 W / 240 lm (0%)
Emergency : 240 lm

9 7E x

Order No. : !919013004995 PROF REC SPOT LED2S CO NM3 ELD IP20 -- Emergency Light
Luminaire name : E4D COR
Equipment : 1 x 2 W / 222 lm (0%)
Emergency : 222 lm

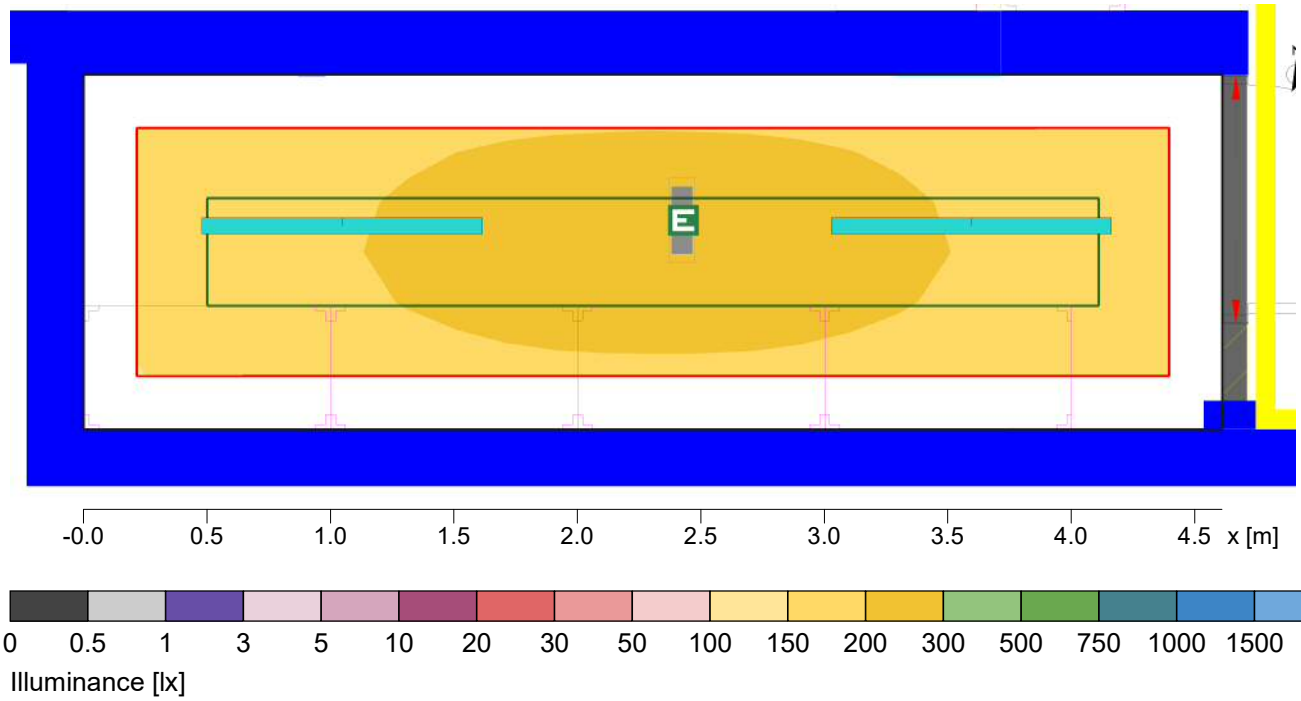
21 2E x

Order No. : !919013004997 PROF SM SPOT LED4S CO NM3 ELD IP65 -- Emergency Lightir
Luminaire name : E9D-H COR
Equipment : 1 x 3 W / 438 lm (0%)
Emergency : 438 lm

2 Secure Store

2.1 Summary, Secure Store

2.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.06 m
Maintenance factor	0.80
Total lamp luminous flux	8200 lm
Luminaire luminous flux	8198 lm
Total power	68.0 W
Total power per area (6.62 m²)	10.28 W/m² (5.33 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	193 lx	63 lx
E_{min}	157 lx	56 lx
$E_{min}/\bar{E}_m$ (U_o)	0.82	0.89
E_{min}/E_{max} (U_d)	0.75	
E_z/E_h		0.26
Position	0.00 m (rot: 0°/0°)	0.00 m (rot: 0°/0°)

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

2 Secure Store

2.1 Summary, Secure Store

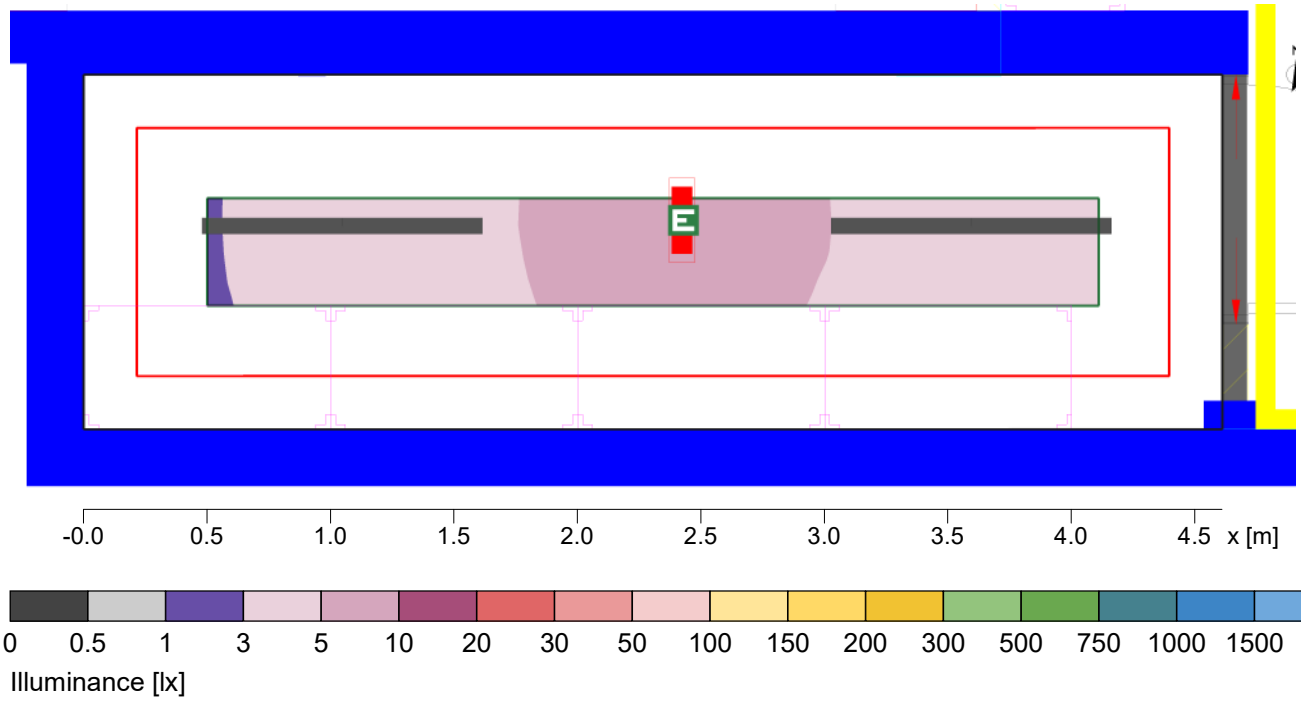
2.1.1 Result overview, Evaluation area 1

		Philips Lighting	
10	2 x	Order No.	: !BN126C LED41S/840 PSD L1200
		Luminaire name	: A1D
		Equipment	: 1 x LED41S/840 34 W / 4100 lm

2 Secure Store

2.2 Summary, Secure Store

2.2.1.1 Result overview (emergency lighting)



General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 3.06 m	
Maximum I	: 68 cd	<= 1600 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 3.61m x 0.44m (32 x 4 pts), Height = 0.00m			
1	2.83 lx	5.72 lx	1: 2.02
	>= 0.5 lx		>= 1 : 40

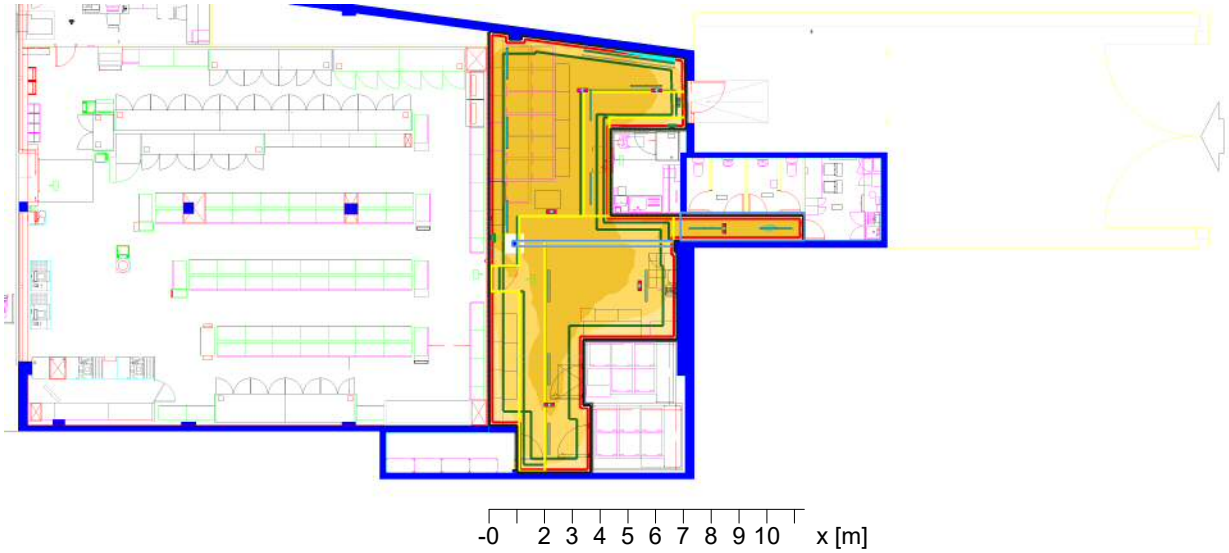
Type No.\Make

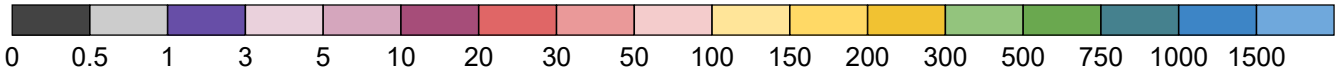
11	1E x	Order No.	: !919013004998 PROF SM BKD LED2S M3 ELD IP65	-- Emergency Lighting --
		Luminaire name	: ED6	
		Equipment	: 1 x 2 W / 223 lm (0%)	
		Emergency	: 223 lm	

3 Warehouse

3.1 Summary, Warehouse

3.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total lamp luminous flux	49200 lm
Luminaire luminous flux	49188 lm
Total power	408.0 W
Total power per area (84.12 m²)	4.85 W/m² (2.23 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	218 lx	91 lx
E_{min}	109 lx	56 lx
$E_{min}/\bar{E}_m$ (U_o)	0.50	0.61
E_{min}/E_{max} (U_d)	0.36	
E_z/E_h		0.38
Position	0.00 m	0.45 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

3 Warehouse

3.1 Summary, Warehouse

3.1.1 Result overview, Evaluation area 1

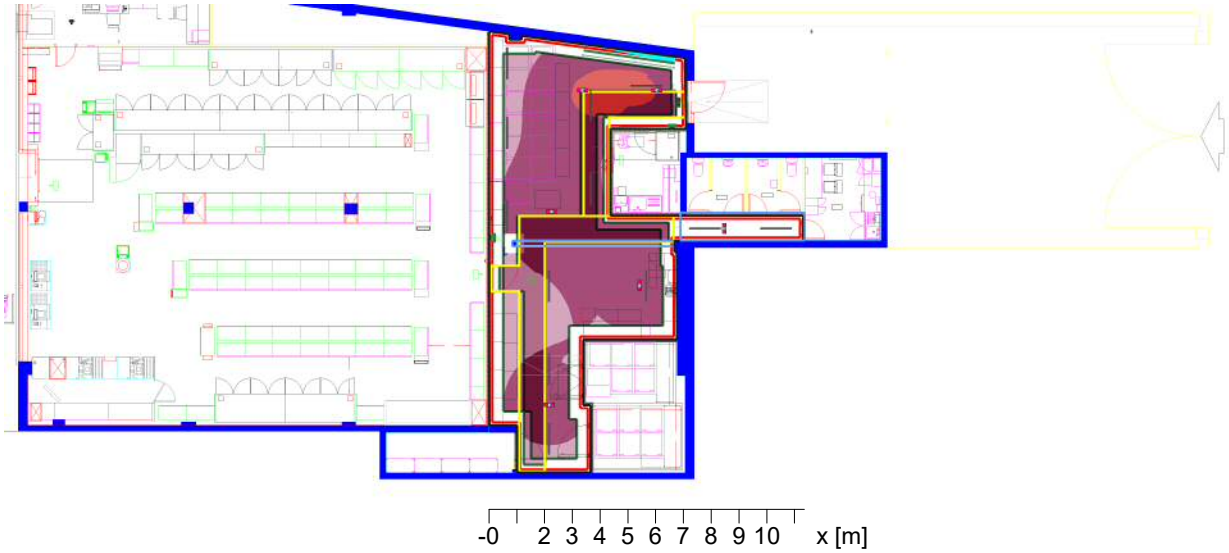
Philips Lighting

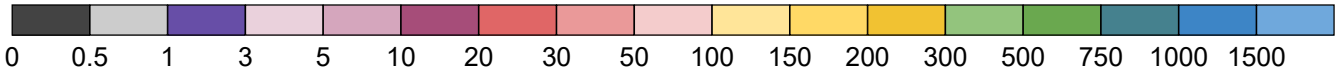
10 12 x Order No. : !BN126C LED41S/840 PSD L1200
Luminaire name : A1D
Equipment : 1 x LED41S/840 34 W / 4100 lm

3 Warehouse

3.2 Summary, Warehouse

3.2.1.1 Result overview (emergency lighting)





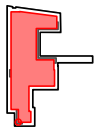
Illuminance [lx]

General

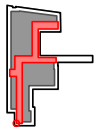
Calculation algorithm used	: Direct component
Maintenance factor	: 0.8
Height (phot.centre)	-variable-
Maximum I	: 170 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 6.08m x 14.63m (9 x 21 pts), Height = 0.00m			
1	1.92 lx	22.51 lx	1: 11.75
	>= 0.5 lx		>= 1 : 40



1 Escape Route			
Calculation field: 13.45m x 6.37m (48 x 23 pts), Height = 0.00m			
2	5.38 lx	22.52 lx	1: 4.19
	>= 1 lx		>= 1 : 40



Places to highlight

No.	Emin [lx]	Surface Emax [lx]

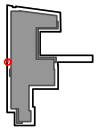
3 Warehouse

3.2 Summary, Warehouse

3.2.1.1 Result overview (emergency lighting)

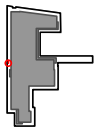
1 Call Point Location 1
Calculation field: 0.2m x 0.1m (2 x 2 pts)

1	7.88 lx >= 5 lx	8.76 lx



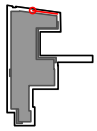
3 Fire extinguishers Location 1
Calculation field: 0.34m x 0.4m (2 x 2 pts)

2	6.11 lx >= 5 lx	7.76 lx



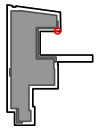
4 DB
Calculation field: 3.3m x 1.39m (6 x 3 pts)

3	11.21 lx >= 15 lx	39.20 lx



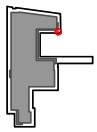
5 Call Point Location 2
Calculation field: 0.2m x 0.1m (2 x 2 pts)

4	11.44 lx >= 5 lx	13.29 lx



6 Fire extinguishers Location 2
Calculation field: 0.34m x 0.4m (2 x 2 pts)

5	6.31 lx >= 5 lx	9.35 lx



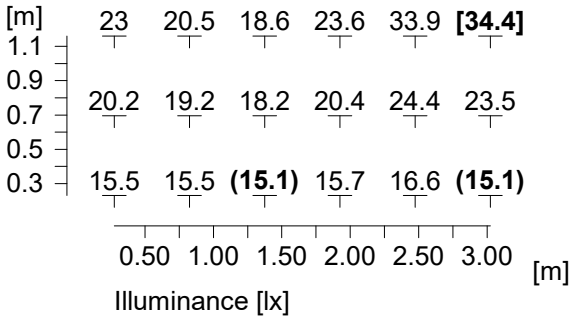
Type No.\Make

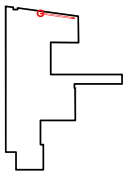
3 6E x **LIAL Eulumdat**

Order No.	: !SM BKD LED9S/840 PSD L370 NM3 ELD	-- Emergency Lighting --
Luminaire name	: B6D	
Equipment	: 1 x OLP 2 EMERGENCY 4.7 W / 590 lm (0%)	
Emergency	: 590 lm	

3.2 Calculation results, Warehouse

3.2.2 Table, DB (E)





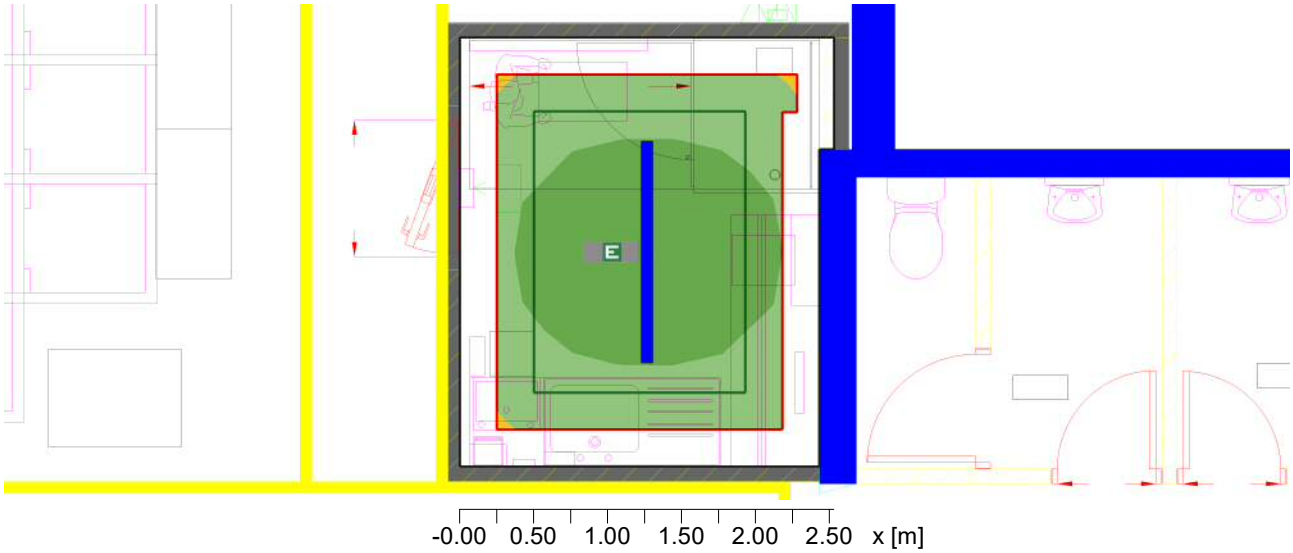
Required minimum illuminance : 15 lx (lower values are highlighted in red)

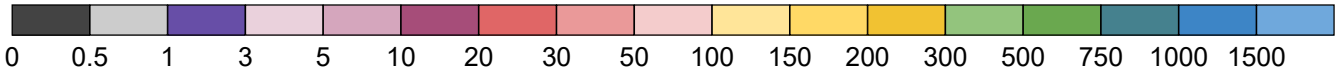
Minimum illuminance	Emin	: 15 lx
Maximum illuminance	Emax	: 34 lx
Diversity	Emin/Emax	: 1 : 2.28 (0.44) (Threshold value 1:40)
Calculation algorithm used		: Direct component
Maintenance factor		: 0.8

4 Bakery

4.1 Summary, Bakery

4.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.35 m
Maintenance factor	0.80
Total lamp luminous flux	6000 lm
Luminaire luminous flux	5999 lm
Total power	43.0 W
Total power per area (7.12 m²)	6.04 W/m² (1.21 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	497 lx	223 lx
E_{min}	348 lx	187 lx
$E_{min}/\bar{E}_m$ (U_o)	0.70	0.84
E_{min}/E_{max} (U_d)	0.53	
E_z/E_h		0.34
Position	0.85 m	1.30 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

4 Bakery

4.1 Summary, Bakery

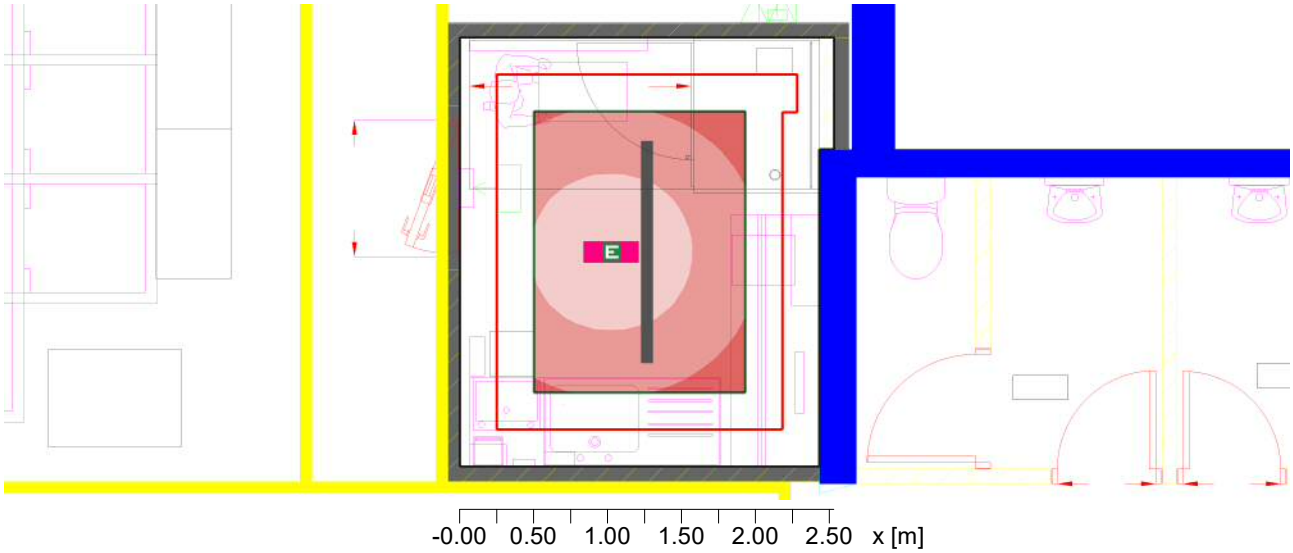
4.1.1 Result overview, Evaluation area 1

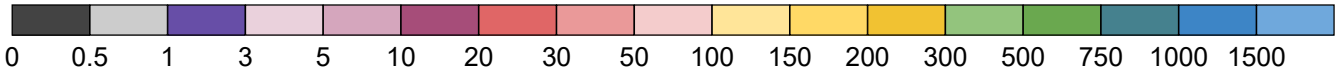
15 1 x **Philips Lighting**
Order No. : !WT120C G2 L1500 1 xLED60S/840
Luminaire name : B4D
Equipment : 1 x LED60S/840 43 W / 6000 lm

4 Bakery

4.2 Summary, Bakery

4.2.1.1 Result overview (emergency lighting)



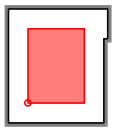


General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 2.30 m	
Maximum I	: 170 cd	<= 500 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 1.43m x 1.9m (5 x 6 pts), Height = 0.85m			
1	19.86 lx	64.20 lx	1: 3.23
	>= 15 lx		>= 1 : 40



Type No.\Make

3 1E x



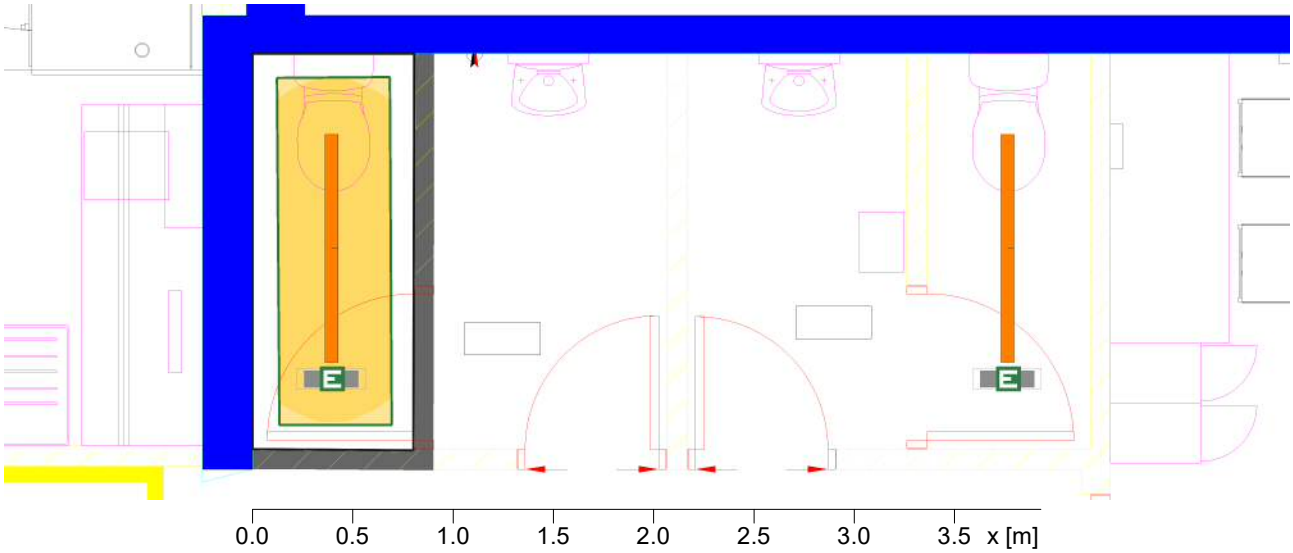
LIAL Eulumdat

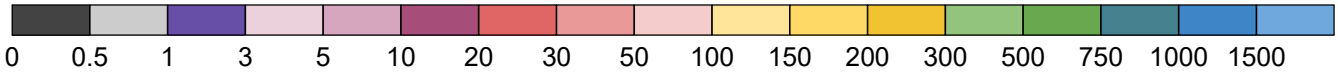
Order No.	: !SM BKD LED9S/840 PSD L370 NM3 ELD	-- Emergency Lighting --
Luminaire name	: B6D	
Equipment	: 1 x OLP 2 EMERGENCY 4.7 W / 590 lm (0%)	
Emergency	: 590 lm	

5 WC

5.1 Summary, WC

5.1.1 Result overview, Reference plane 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height of luminaire plane	2.26 m
Maintenance factor	0.80
Total luminous flux	5000 lm
Total power	36 W
Total power per area (1.58 m²)	22.72 W/m² (13.23 W/m²/100lx)

Illuminance

Average illuminance	$\bar{E}_m$	172 lx
Minimum illuminance	E_{min}	149 lx
Maximum illuminance	E_{max}	188 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:1.15 (0.87)
Diversity U_d	E_{min}/E_{max}	1:1.26 (0.79)

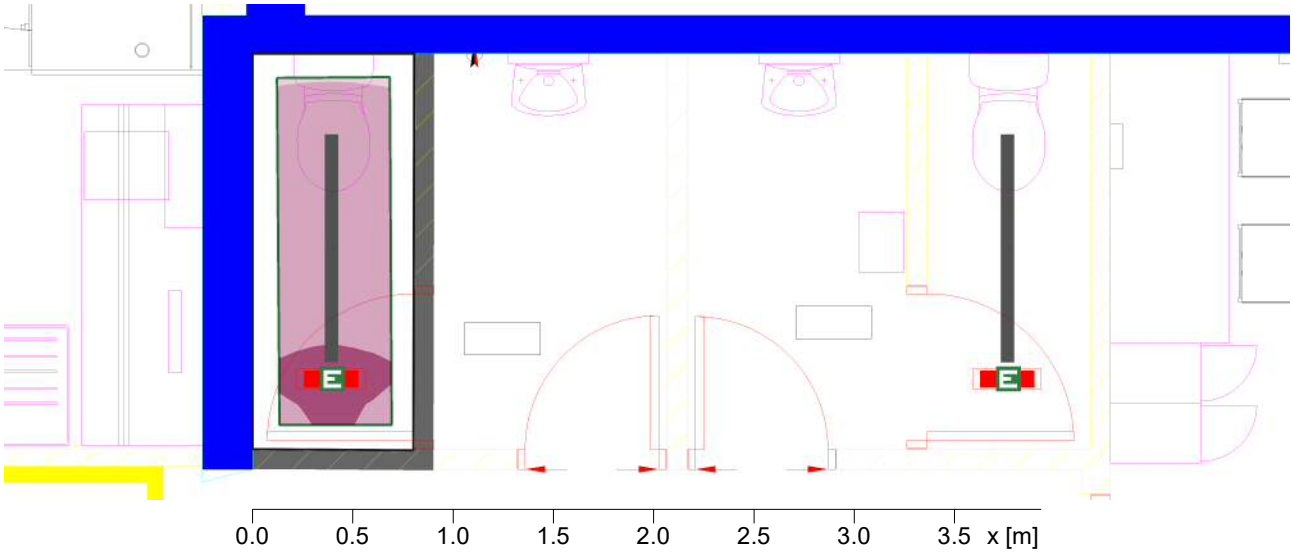
Type No.\Make

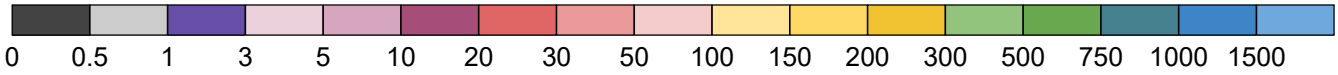
16	2 x	**Philips Lighting**	
		Order No.	: !BN126C LED25S/840 PSU L1200
		Luminaire name	: A3D
		Equipment	: 1 x LED25S/840 18 W / 2500 lm

5 WC

5.2 Summary, WC

5.2.1.1 Result overview (emergency lighting)





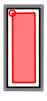
Illuminance [lx]

General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 2.26 m	
Maximum I	: 68 cd	<= 500 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 2			
Calculation field: 0.57m x 1.73m (4 x 13 pts), Height = 0.00m			
1	4.76 lx	10.42 lx	1: 2.19
	>= 0.5 lx		>= 1 : 40



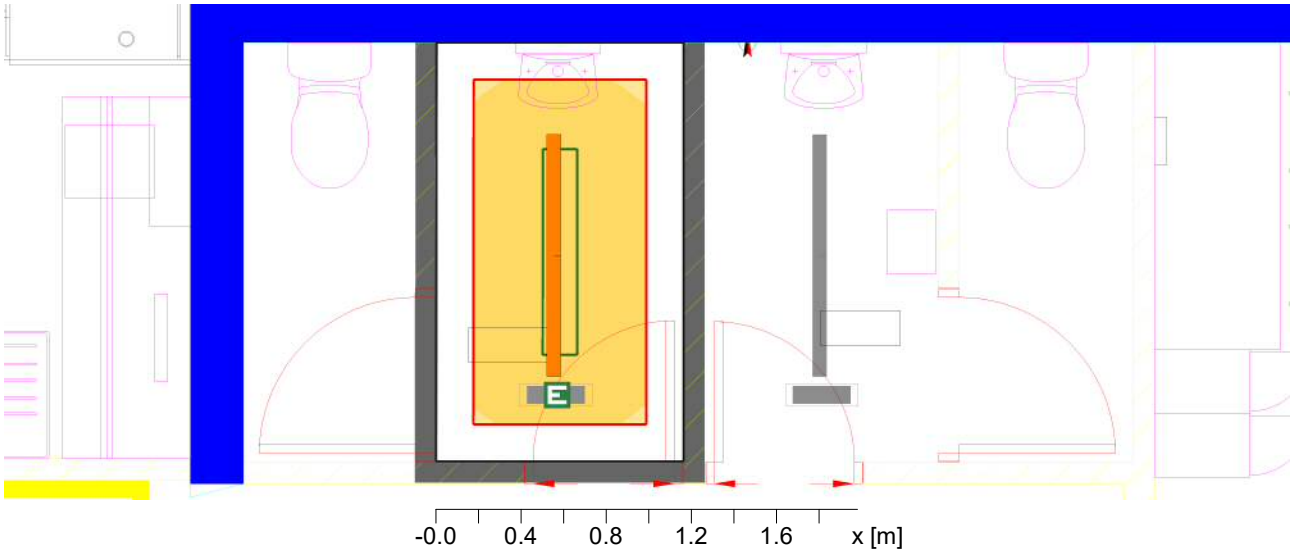
Type No.\Make

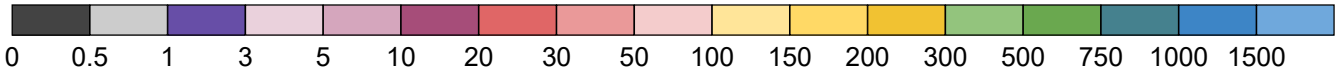
11	2E x	Order No.	: !919013004998 PROF SM BKD LED2S M3 ELD IP65	-- Emergency Lighting --
		Luminaire name	: ED6	
		Equipment	: 1 x 2 W / 223 lm (0%)	
		Emergency	: 223 lm	

6 WC Lobby

6.1 Summary, WC Lobby

6.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.26 m
Maintenance factor	0.80
Total lamp luminous flux	2500 lm
Luminaire luminous flux	2500 lm
Total power	18.0 W
Total power per area (2.28 m²)	7.89 W/m² (4.50 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	175 lx	68 lx
E_{min}	158 lx	66 lx
$E_{min}/\bar{E}_m$ (U_o)	0.90	0.97
E_{min}/E_{max} (U_d)	0.83	
E_z/E_h		0.28
Position	0.00 m	0.45 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

6 WC Lobby

6.1 Summary, WC Lobby

6.1.1 Result overview, Evaluation area 1

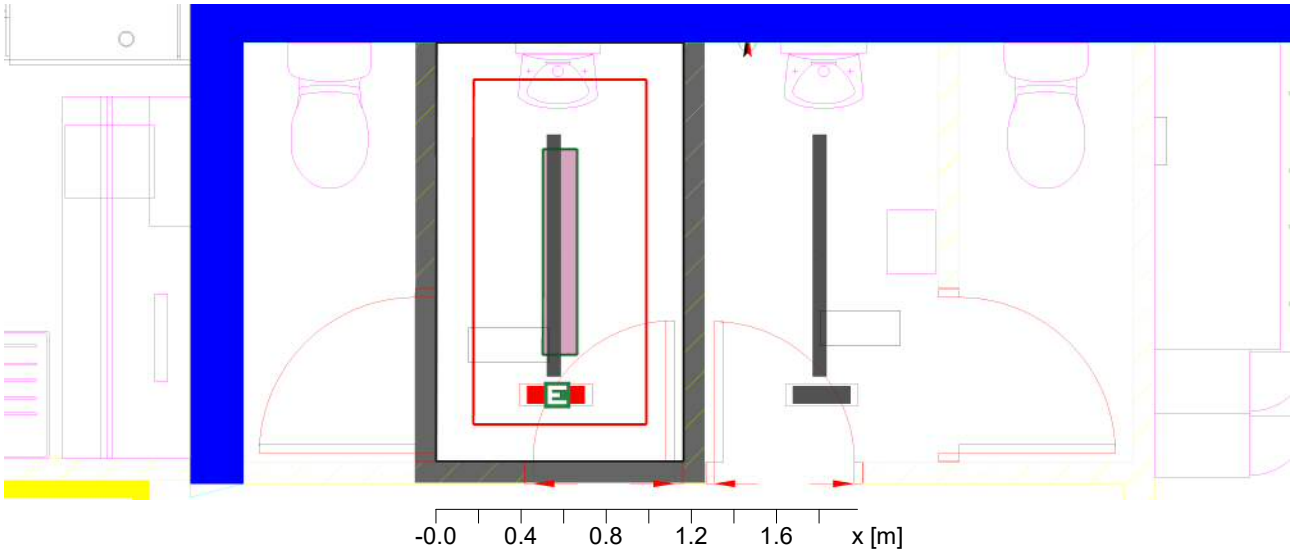
16 1 x

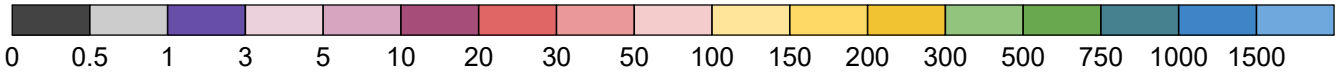
Philips Lighting
Order No. : !BN126C LED25S/840 PSU L1200
Luminaire name : A3D
Equipment : 1 x LED25S/840 18 W / 2500 lm

6 WC Lobby

6.2 Summary, WC Lobby

6.2.1.1 Result overview (emergency lighting)





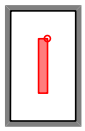
Illuminance [lx]

General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 2.26 m	
Maximum I	: 68 cd	<= 500 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 0.97m x 0.16m (17 x 3 pts), Height = 0.00m			
1	6.78 lx	9.96 lx	1: 1.47
	>= 0.5 lx		>= 1 : 40



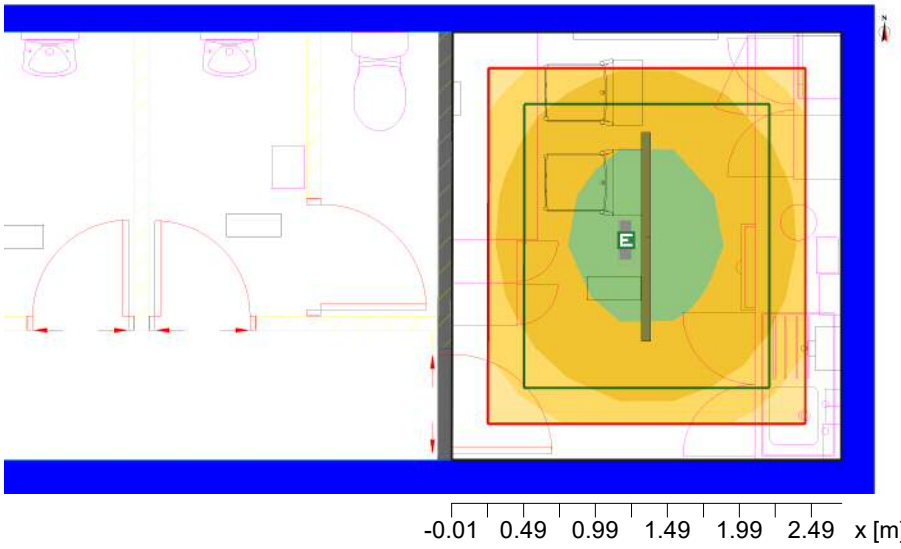
Type No.\Make

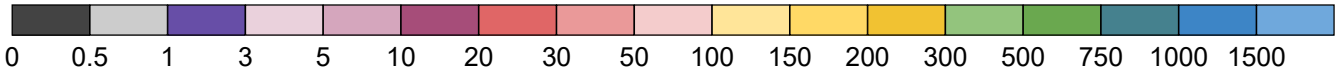
11	1E x	Order No.	: !919013004998 PROF SM BKD LED2S M3 ELD IP65	-- Emergency Lighting --
		Luminaire name	: ED6	
		Equipment	: 1 x 2 W / 223 lm (0%)	
		Emergency	: 223 lm	

7 Staff Room

7.1 Summary, Staff Room

7.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.28 m
Maintenance factor	0.80
Total lamp luminous flux	3500 lm
Luminaire luminous flux	3499 lm
Total power	25.5 W
Total power per area (8.03 m²)	3.18 W/m² (1.31 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	242 lx	109 lx
E_{min}	142 lx	86 lx
$E_{min}/\bar{E}_m$ (U_o)	0.59	0.79
E_{min}/E_{max} (U_d)	0.40	
E_z/E_h		0.35
Position	0.75 m	1.20 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

7 Staff Room

7.1 Summary, Staff Room

7.1.1 Result overview, Evaluation area 1

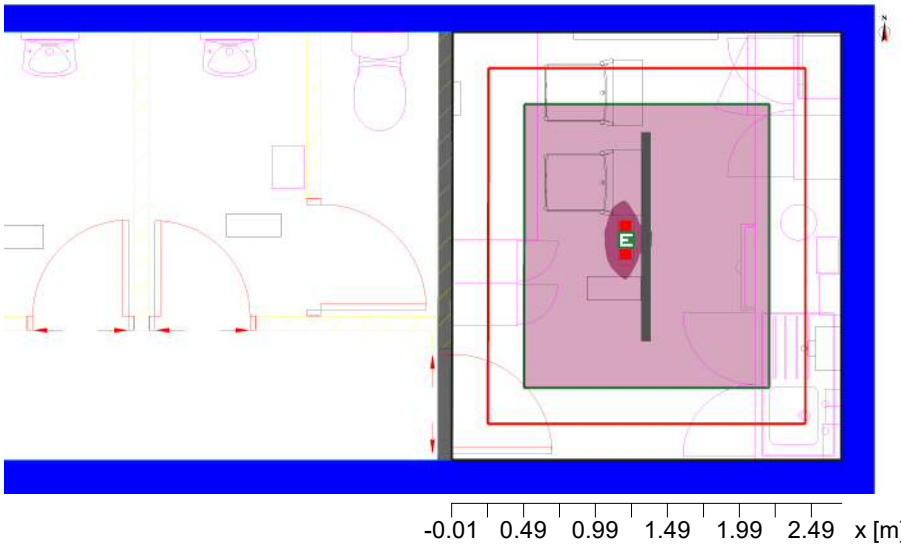
17 1 x

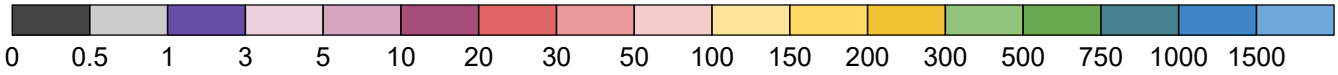
Philips Lighting
Order No. : !BN126C LED35S/840 PSU L1500
Luminaire name : A2D
Equipment : 1 x LED35S/840 25.5 W / 3500 lm

7 Staff Room

7.2 Summary, Staff Room

7.2.1.1 Result overview (emergency lighting)



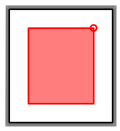


General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 2.27 m	
Maximum I	: 68 cd	<= 500 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 1.97m x 1.7m (6 x 5 pts), Height = 0.00m			
1	4.93 lx	10.34 lx	1: 2.10
	>= 0.5 lx		>= 1 : 40



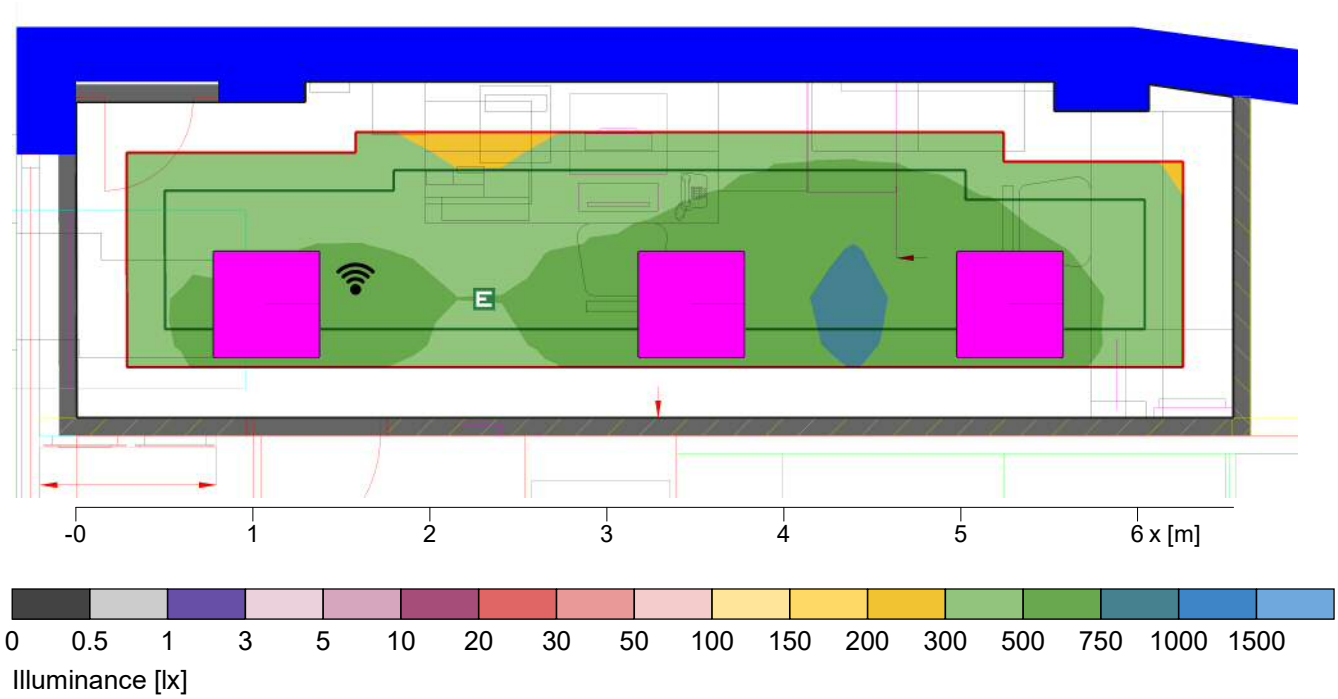
Type No.\Make

11	1E x	Order No.	: !919013004998 PROF SM BKD LED2S M3 ELD IP65	-- Emergency Lighting --
		Luminaire name	: ED6	
		Equipment	: 1 x 2 W / 223 lm (0%)	
		Emergency	: 223 lm	

8 Office

8.1 Summary, Office

8.1.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.40 m
Maintenance factor	0.80
Total lamp luminous flux	9300 lm
Luminaire luminous flux	9279 lm
Total power	66.0 W
Total power per area (12.13 m²)	5.44 W/m² (1.06 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	511 lx	177 lx
E_{min}	274 lx	99 lx
$E_{min}/\bar{E}_m$ (U_o)	0.54	0.56
E_{min}/E_{max} (U_d)	0.34	
E_z/E_h		0.28
Position	0.75 m	1.20 m

Major surfaces	$\bar{E}_m$	U_o

Type No.\Make

8 Office

8.1 Summary, Office

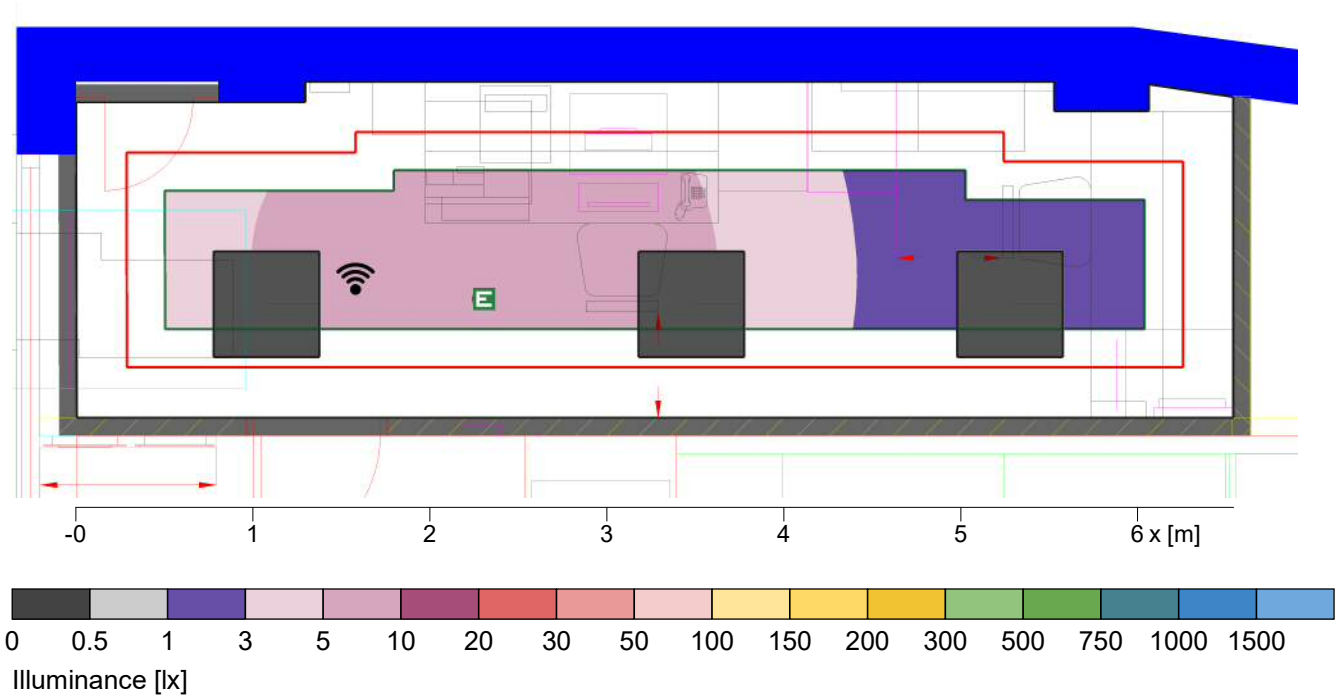
8.1.1 Result overview, Evaluation area 1

		Philips Lighting	
18	3 x	Order No.	: !RC136B PSD W60L60 1 x31S_37S_43S/840 OC
		Luminaire name	: B12D
		Equipment	: 1 x 31S_37S_43S/840 22 W / 3100 lm

8 Office

8.2 Summary, Office

8.2.1.1 Result overview (emergency lighting)

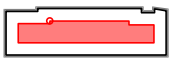


General

Calculation algorithm used	: Direct component	
Maintenance factor	: 0.8	
Height (phot.centre)	: 2.40 m	
Maximum I	: 59 cd	<= 500 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
Anti panic area 1.1			
Calculation field: 0.91m x 5.54m (5 x 30 pts), Height = 0.00m			
1	1.06 lx	7.78 lx	1: 7.36
	>= 0.5 lx		>= 1 : 40



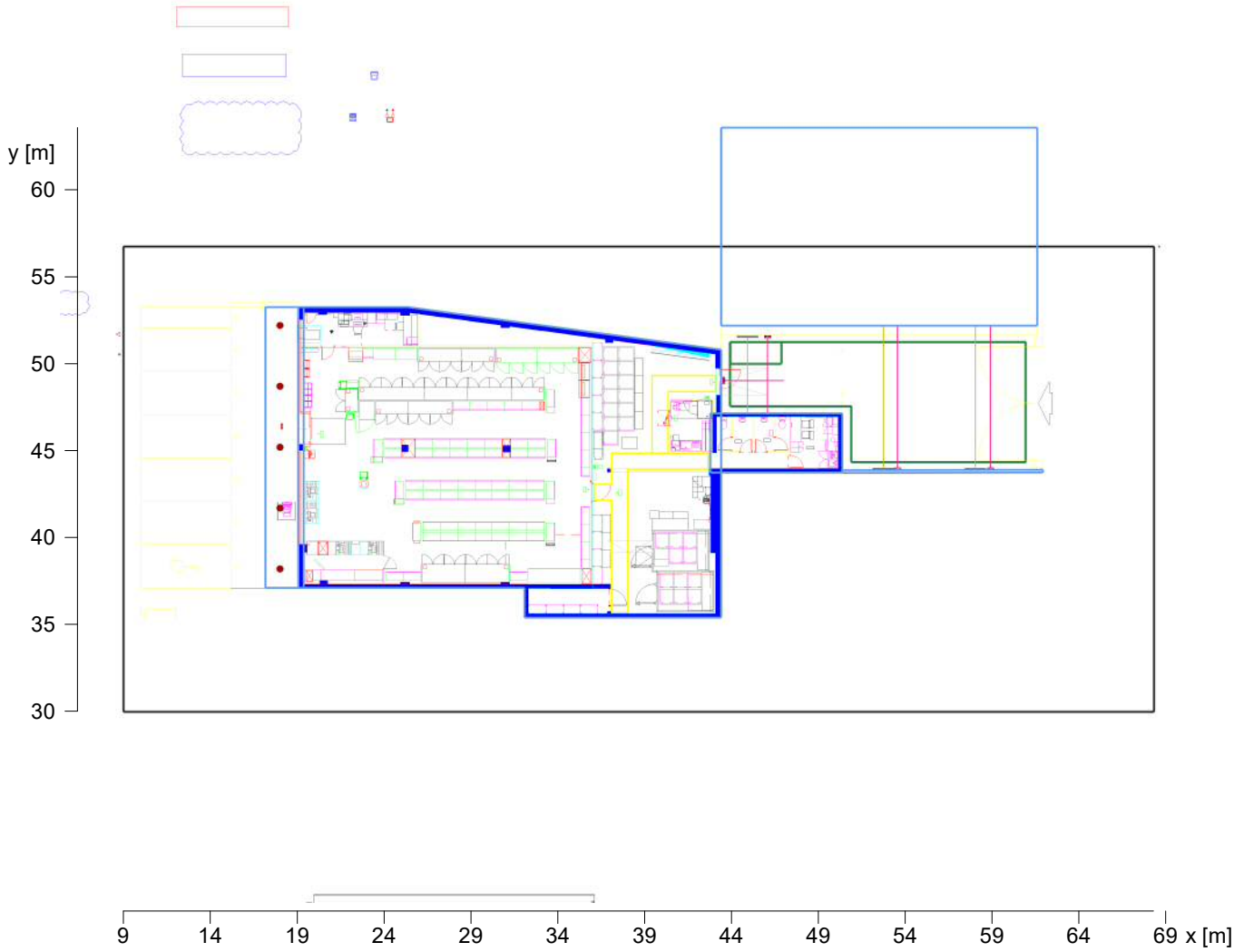
Type No.\Make

8	1E x	Order No.	: !919013004995 PROF REC SPOT LED2S OA NM3 ELD IP20	-- Emergency Light
		Luminaire name	: E4D OA	
		Equipment	: 1 x 2 W / 240 lm (0%)	
		Emergency	: 240 lm	

1 Exterior 1

1.1 Description, Exterior 1

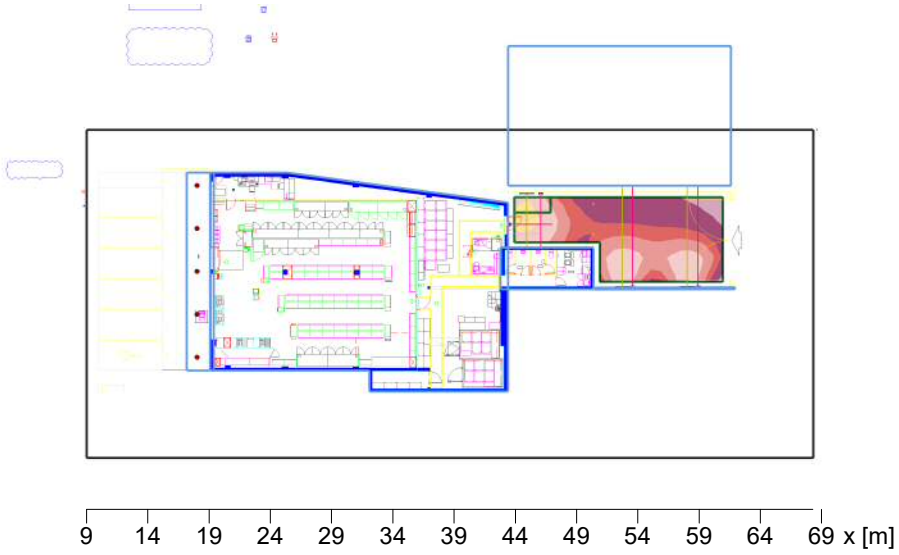
1.1.1 Floor plan

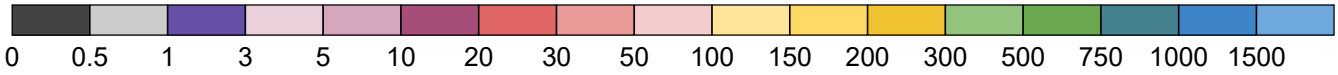


1 Exterior 1

1.2 Summary, Exterior 1

1.2.1 Result overview, Yard





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	25500 lm
Total power	230.5 W
Total power per area (1585.81 m²)	0.15 W/m²
Upward light ratio (RUL)	18 %

Illuminance

Average illuminance	$\bar{E}_m$	37 lx
Minimum illuminance	E_{min}	7 lx
Maximum illuminance	E_{max}	128 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:5.4 (0.19)
Diversity U_d	E_{min}/E_{max}	1:18.4 (0.05)

Type No.\Make

Philips Lighting

1 1 x
Order No. : !911401852483 BVP164 LED24/840 PSU 20W SWB CE
Luminaire name : B17
Equipment : 1 x LED25/740/- 35 W / 2500 lm

2 3 x
Order No. : !WT120C G2 L1200 1 xLED40S/840
Luminaire name : B3D
Equipment : 1 x LED40S/840 28.5 W / 4000 lm

The ULR value has been calculated without obstruction by other objects.

1 Exterior 1

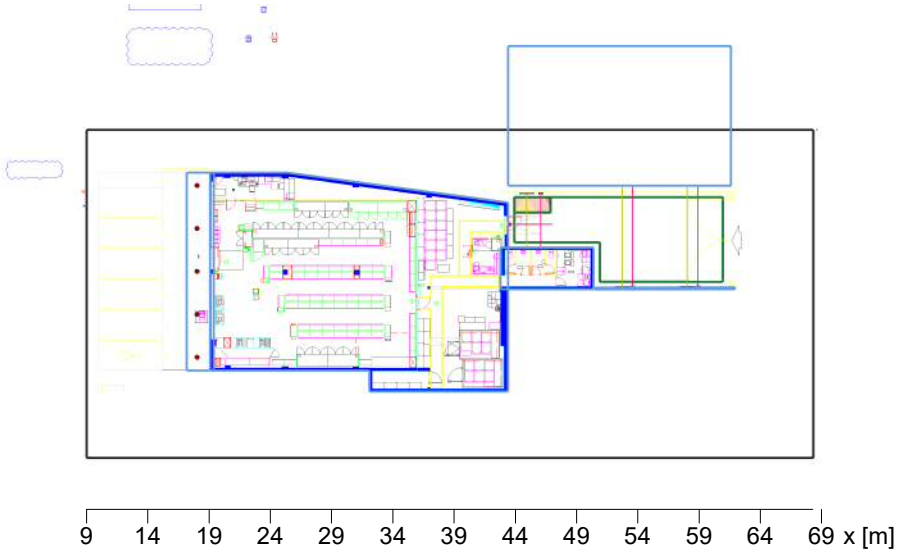
1.2 Summary, Exterior 1

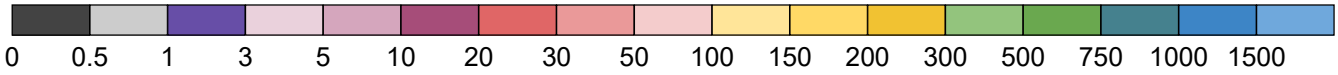
1.2.1 Result overview, Yard

13 5 x Order No. : !WL140V PSED 1 xLED20S/840 O
Luminaire name : B5D
Equipment : 1 x LED20S/840 22 W / 2200 lm

1.2 Summary, Exterior 1

1.2.2 Result overview, Assumed Plant location





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80
Total luminous flux	25500 lm
Total power	230.5 W
Total power per area (1585.81 m²)	0.15 W/m²
Upward light ratio (RUL)	18 %

Illuminance

Average illuminance	$\bar{E}_m$	87 lx
Minimum illuminance	E_{min}	41 lx
Maximum illuminance	E_{max}	119 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.12 (0.47)
Diversity U_d	E_{min}/E_{max}	1:2.9 (0.34)

Type No.\Make

Philips Lighting

1 1 x
Order No. : !911401852483 BVP164 LED24/840 PSU 20W SWB CE
Luminaire name : B17
Equipment : 1 x LED25/740/- 35 W / 2500 lm

2 3 x
Order No. : !WT120C G2 L1200 1 xLED40S/840
Luminaire name : B3D
Equipment : 1 x LED40S/840 28.5 W / 4000 lm

The ULR value has been calculated without obstruction by other objects.

1.2 Summary, Exterior 1

1.2.2 Result overview, Assumed Plant location

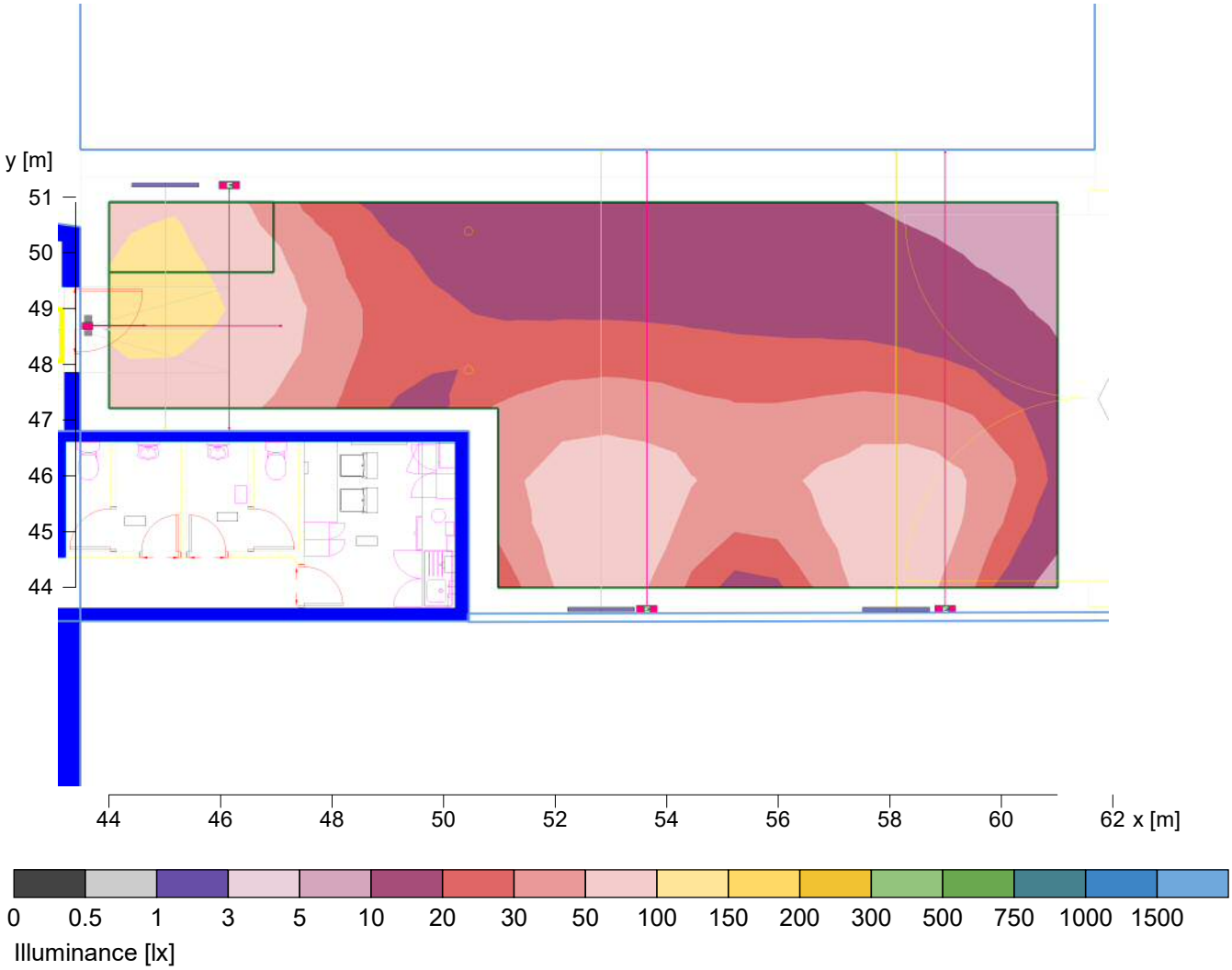
13 5 x 

Order No. : !WL140V PSED 1 xLED20S/840 O
Luminaire name : B5D
Equipment : 1 x LED20S/840 22 W / 2200 lm

1 Exterior 1

1.3 Calculation results, Exterior 1

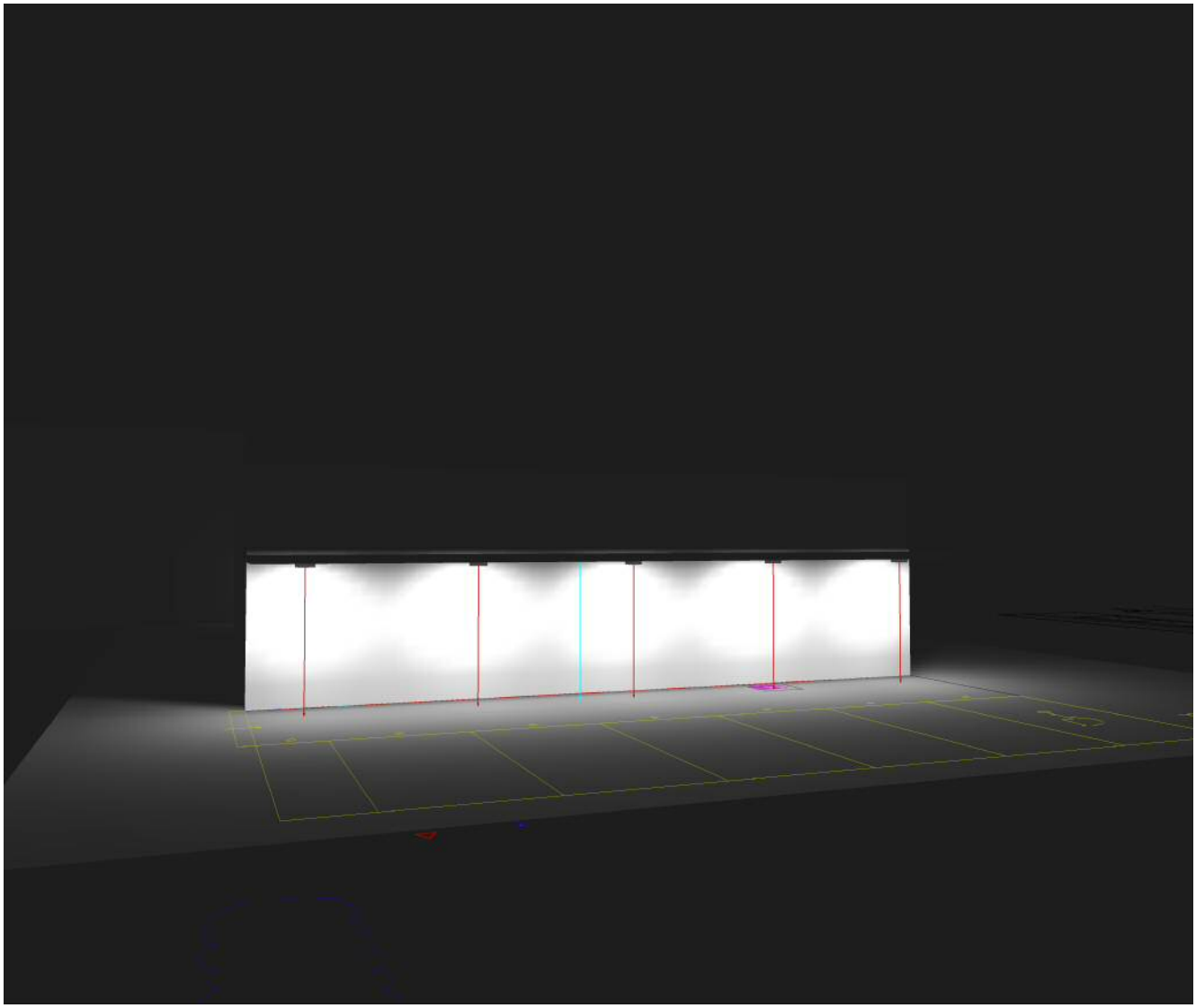
1.3.1 Pseudo colours, Yard (E)



Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 37 lx
Minimum illuminance	E_{min}	: 7 lx
Maximum illuminance	E_{max}	: 128 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 5.40 (0.19)

1.3 Calculation results, Exterior 1

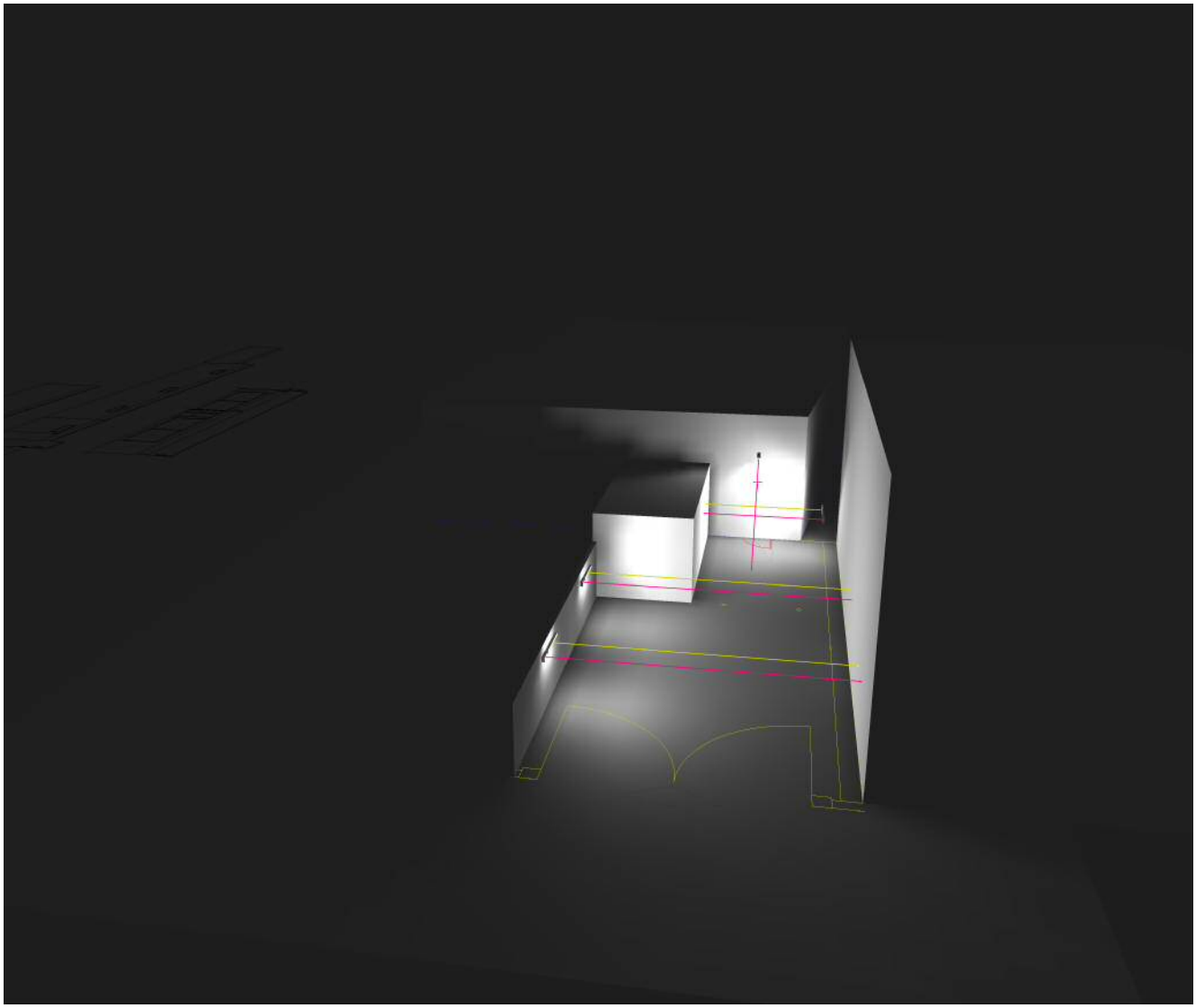
1.3.2 3D luminance, View 1



Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 45.3 cd/m²

1.3 Calculation results, Exterior 1

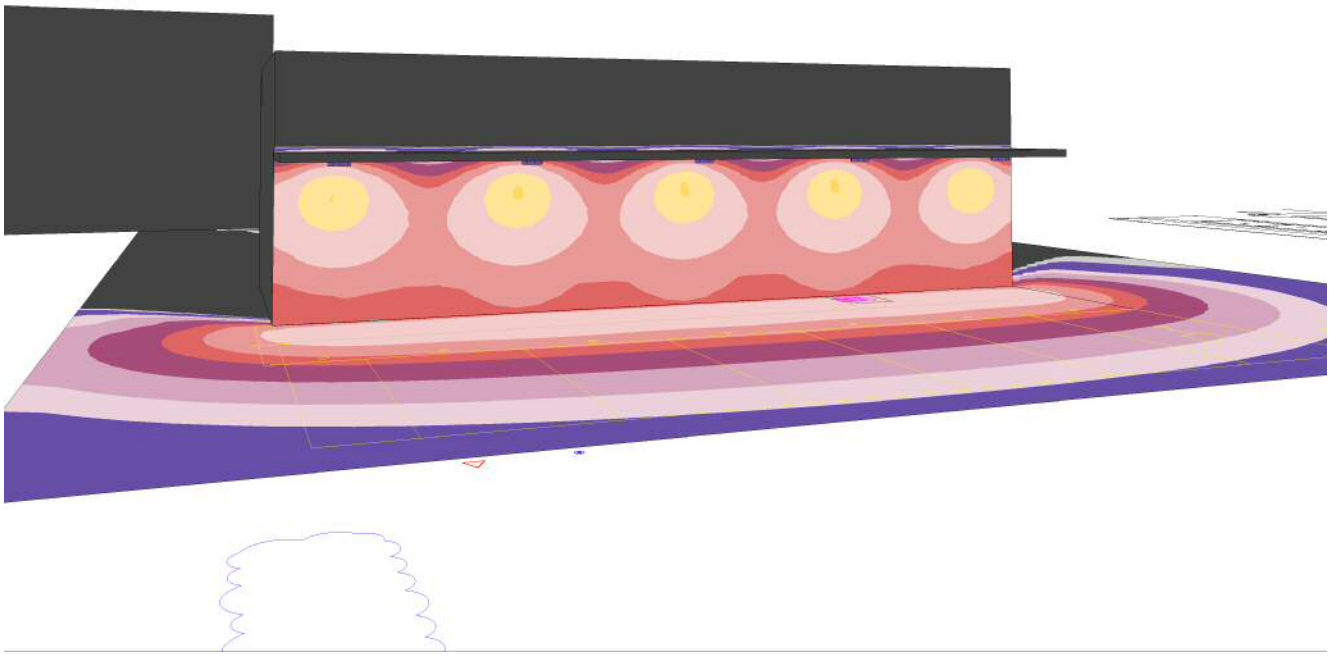
1.3.3 3D luminance, View 2

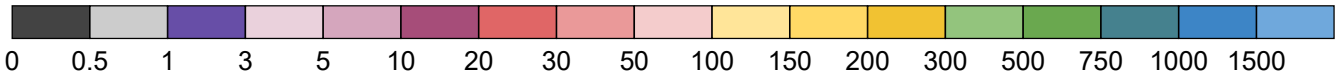


Luminance in the scene
Minimum: : 0 cd/m²
Maximum: : 45.3 cd/m²

1.3 Calculation results, Exterior 1

1.3.4 3D pseudo colours, View 1 (E)

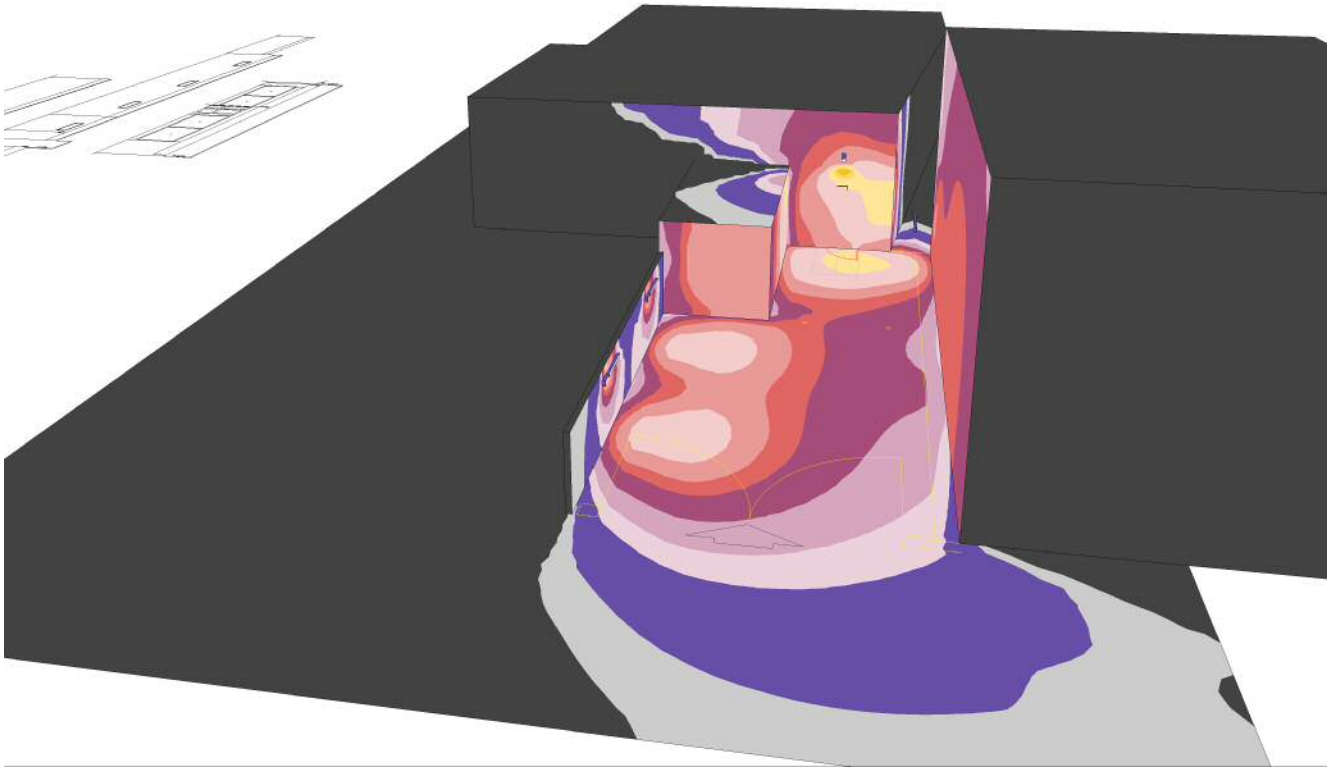


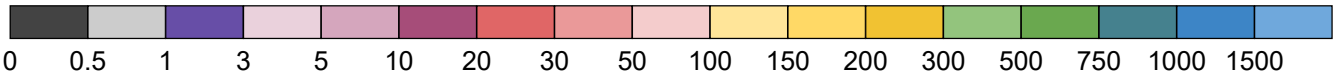


Illuminance [lx]

1.3 Calculation results, Exterior 1

1.3.5 3D pseudo colours, View 2 (E)



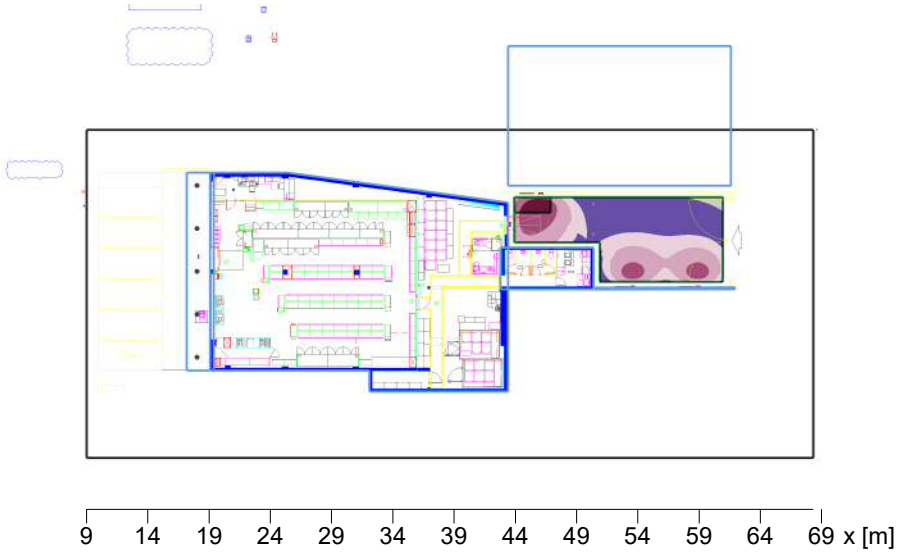


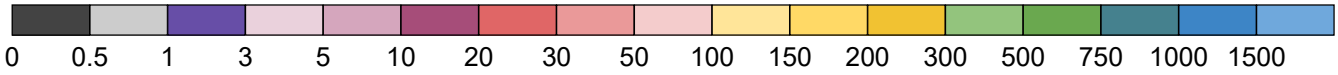
Illuminance [lx]

1 Exterior 1

1.4 Summary, Exterior 1

1.4.1.1 Result overview (emergency lighting)





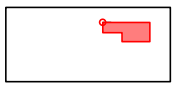
Illuminance [lx]

General

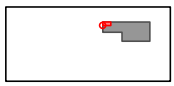
Calculation algorithm used	: Direct component
Maintenance factor	: 0.8
Height (phot.centre)	-variable-
Maximum I	: 170 cd

Anti panic area:

No.	Emin [lx]	Surface Emax [lx]	Ud
2 Yard			
Calculation field: 17m x 6.91m (22 x 9 pts), Height = 0.00m			
1	0.72 lx	17.50 lx	1: 24.23
	>= 0.5 lx		>= 1 : 40



3 Assumed Plant location			
Calculation field: 2.95m x 1.26m (13 x 5 pts), Height = 0.00m			
2	3.18 lx	17.50 lx	1: 5.50
	>= 0.5 lx		>= 1 : 40



Type No.\Make

1 Exterior 1

1.4 Summary, Exterior 1

1.4.1.1 Result overview (emergency lighting)

LIAL Eulumdat

3 4E x



Order No. : !SM BKD LED9S/840 PSD L370 NM3 ELD -- Emergency Lighting --
Luminaire name : B6D
Equipment : 1 x OLP 2 EMERGENCY 4.7 W / 590 lm (0%)
Emergency : 590 lm

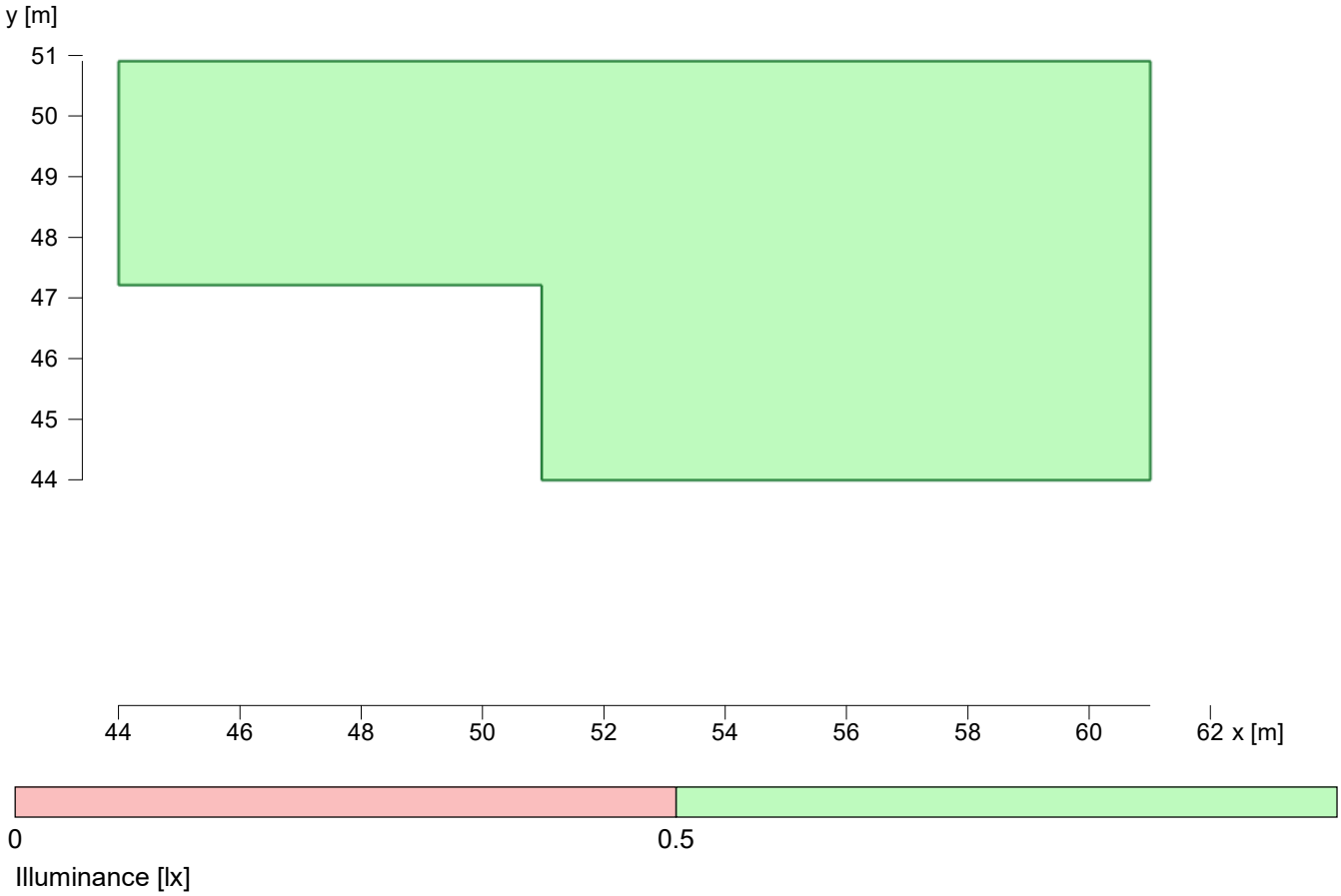
11 1E x



Order No. : !919013004998 PROF SM BKD LED2S M3 ELD IP65 -- Emergency Lighting --
Luminaire name : ED6
Equipment : 1 x 2 W / 223 lm (0%)
Emergency : 223 lm

1.4 Calculation results, Exterior 1

1.4.2 Boundary line, Yard (E)



Required minimum illuminance		: 0.5 lx
Minimum illuminance	Emin	: 0.72 lx
Maximum illuminance	Emax	: 18 lx
Diversity	Emin/Emax	: 1 : 24.20 (0.04) (Threshold value 1:40)
Height		: 0 m
Calculation algorithm used		: Direct component
Maintenance factor		: 0.8