Crumpsall Park

Installation :

Project number :
Customer : LP Swift
Processed by : Mike Whalley
Date : 03.03.2026

Project description:

Ceiling height taken as 2.5m.

Main Hall taken as 3.6m.

Lighting levels measured at 0.75m and floor level.

Note - lighting levels shown for the proposed new LED replacement will be 15% higher initially, due to a maintenance factor of 0.85 being applied to calculations.

This design drawing is for a lighting scheme which has been prepared for the client in collaboration with the client and other stakeholders, and is based upon the pre-construction information provided. The lighting scheme should only be installed and maintained by competent persons
and in accordance with the design drawings, applicable installation instructions and all applicable laws. No changes should be made to the design of the lighting scheme without formal written approval in advance from Pinnacle Electrical, to ensure that any risks to health, safety and welfare from any proposed changes can be identified and properly assessed.

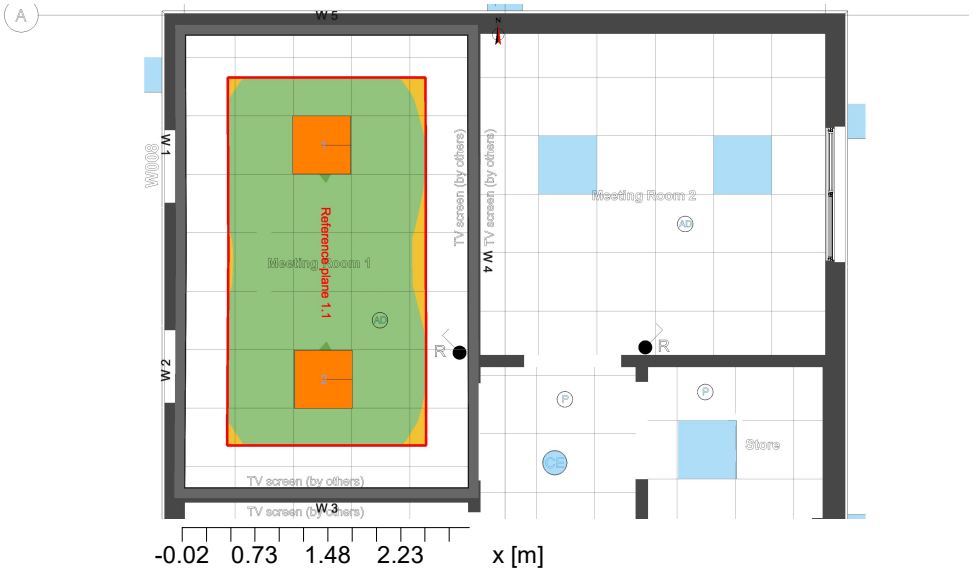
The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

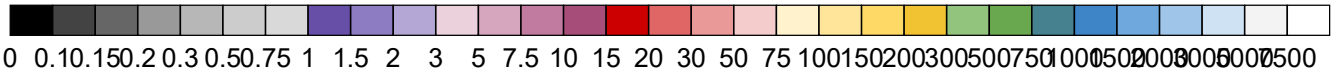
This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

1 Meeting Room 1

1.1 Summary, Meeting Room 1, Light scene 1(C)

1.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	7200.00 lm
Total power	60.0 W
Total power per area (13.60 m²)	4.41 W/m² (1.07 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	412 lx	151 lx
E_{min}	316 lx	117 lx
$E_{min}/\bar{E}_m$ (U_o)	0.77	0.77
E_{min}/E_{max} (U_d)	0.60	
E_z/E_h		0.29
Position	0.75 m	0.75 m
R_{UG} (2.3H 3.6H)	<=16.0	

Luminaire :
(OX-TPA-WS2-6x6NW/LG (30W), LED, , 30.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	67 lx	0.92
M 1.1 (Wall)	164 lx	0.67
M 1.2 (Wall)	161 lx	0.70
M 1.3 (Wall)	187 lx	0.61
M 1.4 (Wall)	152 lx	0.71
M 1.5 (Wall)	185 lx	0.60

1 Meeting Room 1

1.1 Summary, Meeting Room 1, Light scene 1(C)

1.1.1 Result overview, Evaluation area 1

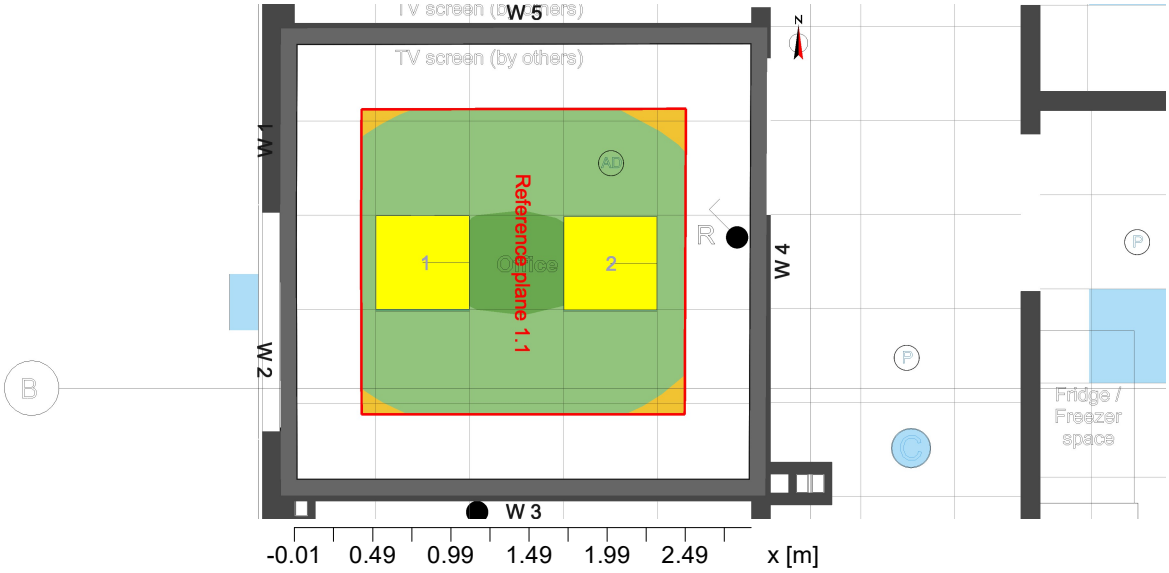
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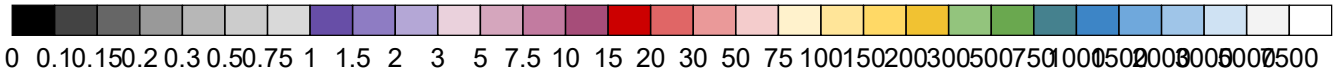
3 2 x Order No. :
Luminaire name : OX-TPA-WS2-6x6NW/LG (30W)
Equipment : 1 x LED 30 W / 3600 lm

2 Office

2.1 Summary, Office, Light scene 1(C)

2.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	4800.00 lm
Total power	40.0 W
Total power per area (8.09 m²)	4.95 W/m² (1.18 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	421 lx	151 lx
E_{min}	296 lx	131 lx
$E_{min}/\bar{E}_m$ (U_o)	0.70	0.87
E_{min}/E_{max} (U_d)	0.56	
E_z/E_h		0.28
Position	0.75 m	0.75 m
R_{UG} (2.2H 2.3H)	<=13.5	

Luminaire :
(OX-TPA-WS2-6x6NW/LG (20W), LED, , 20.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	73 lx	0.87
M 1.2 (Wall)	181 lx	0.54
M 1.3 (Wall)	166 lx	0.73
M 1.4 (Wall)	190 lx	0.61
M 1.5 (Wall)	164 lx	0.73

2 Office

2.1 Summary, Office, Light scene 1(C)

2.1.1 Result overview, Evaluation area 1

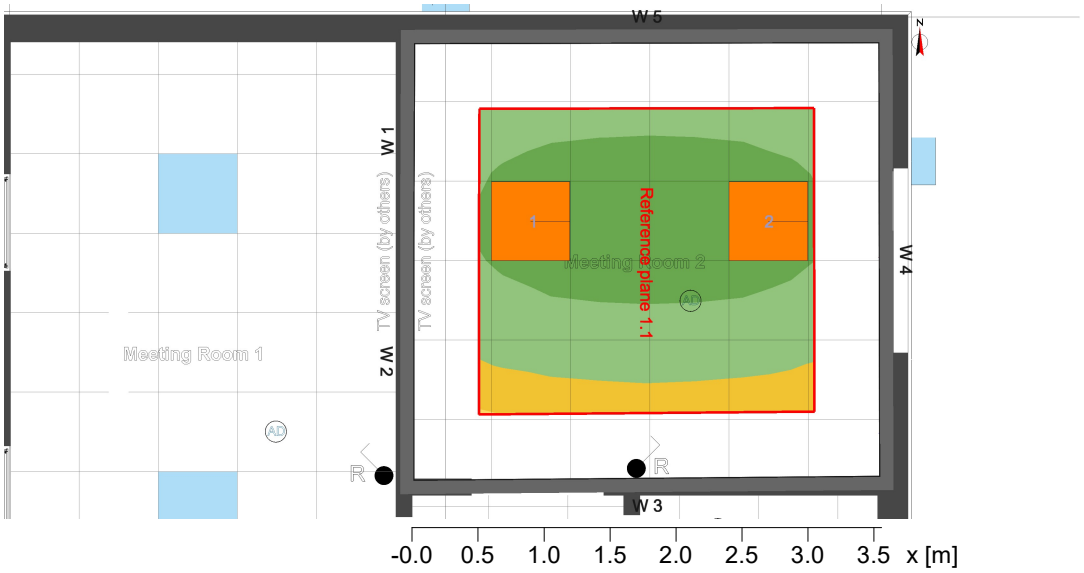
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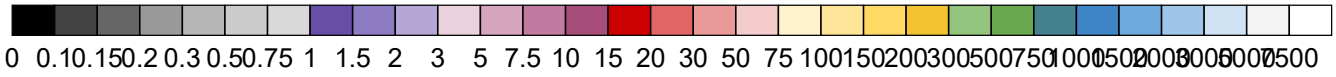
1 2 x Order No. :
Luminaire name : OX-TPA-WS2-6x6NW/LG (20W)
Equipment : 1 x LED 20 W / 2400 lm

3 Meeting Room 2

3.1 Summary, Meeting Room 2, Light scene 1(C)

3.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	7200.00 lm
Total power	60.0 W
Total power per area (11.65 m²)	5.15 W/m² (1.10 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	470 lx	171 lx
E_{min}	243 lx	122 lx
$E_{min}/\bar{E}_m$ (U_o)	0.52	0.71
E_{min}/E_{max} (U_d)	0.40	
E_z/E_h		0.30
Position	0.75 m	0.75 m
R_{UG} (2.6H 2.8H)	<=15.4	

Luminaire :
(OX-TPA-WS2-6x6NW/LG (30W), LED, , 30.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	82 lx	0.78
M 1.2 (Wall)	157 lx	0.50
M 1.3 (Wall)	140 lx	0.73
M 1.4 (Wall)	228 lx	0.42
M 1.5 (Wall)	204 lx	0.79

3 Meeting Room 2

3.1 Summary, Meeting Room 2, Light scene 1(C)

3.1.1 Result overview, Evaluation area 1

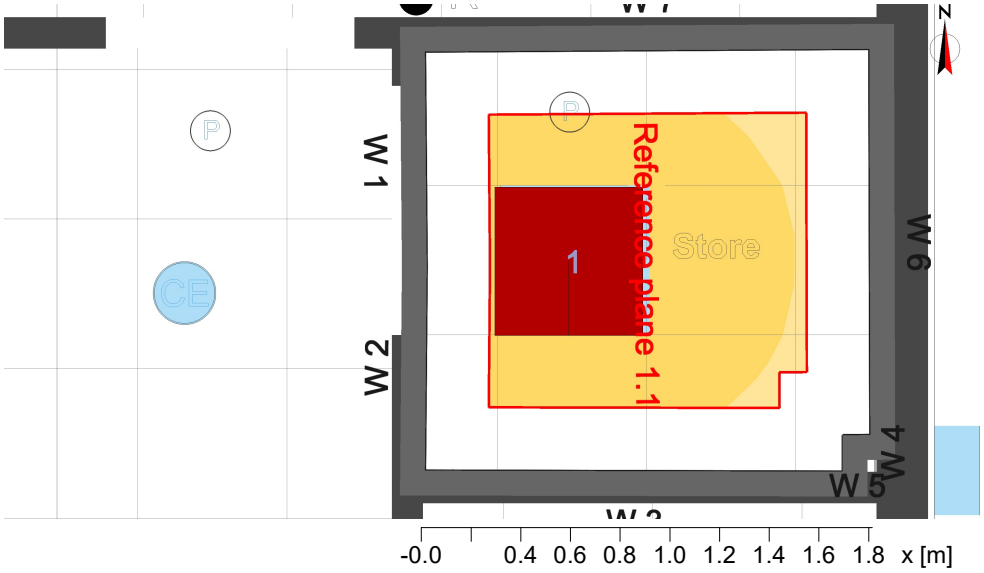
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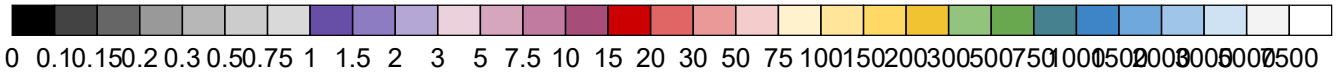
3 2 x Order No. :
Luminaire name : OX-TPA-WS2-6x6NW/LG (30W)
Equipment : 1 x LED 30 W / 3600 lm

4 Store

4.1 Summary, Store, Light scene 1(C)

4.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	2400.00 lm
Total power	20.0 W
Total power per area (3.00 m²)	6.67 W/m² (4.00 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	167 lx	63 lx
E_{min}	144 lx	57 lx
$E_{min}/\bar{E}_m$ (U_o)	0.86	0.91
E_{min}/E_{max} (U_d)	0.80	
E_z/E_h		0.28
Position	0.00 m	0.00 m
R_{UG} (1.4H 1.3H)	10.0	

Luminaire :
(OX-TPA-WS2-6X6NW (20W), LED, , 20.0 W)
Hints:
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces	$\bar{E}_m$	U_o
M 1.82 (Ceiling)	99 lx	0.77
M 1.79 (Wall)	205 lx	0.44
M 1.80 (Wall)	167 lx	0.59
M 1.81 (Wall)	200 lx	0.44

4 Store

4.1 Summary, Store, Light scene 1(C)

4.1.1 Result overview, Evaluation area 1

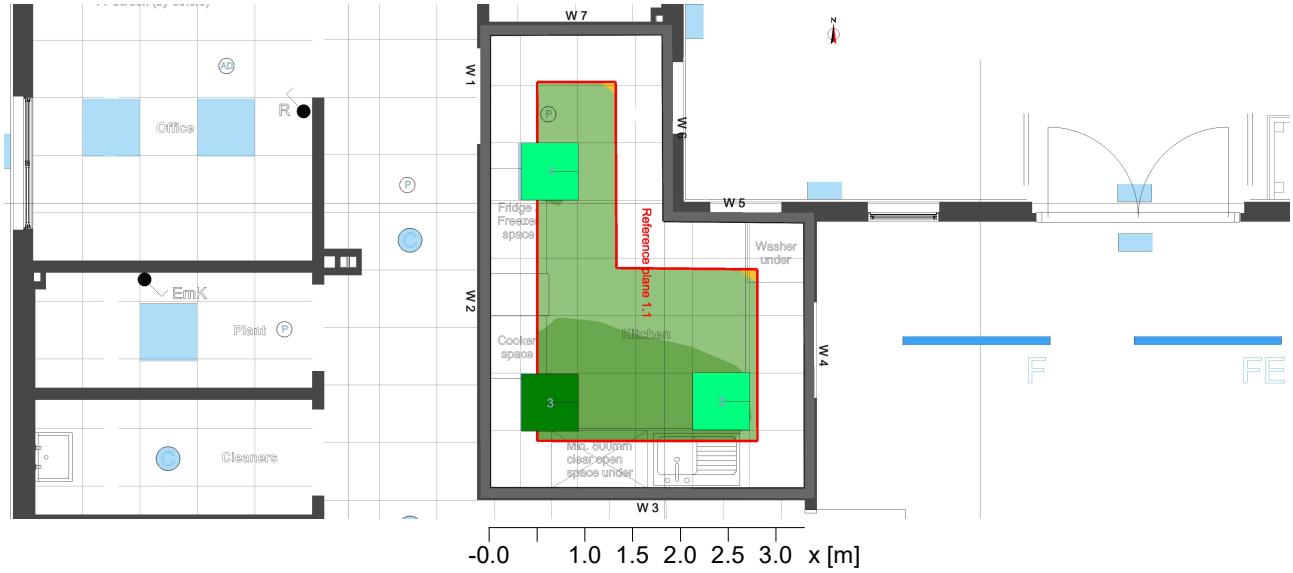
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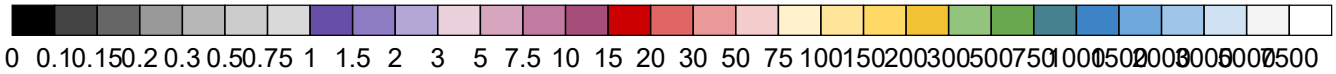
5 1 x Order No. :
Luminaire name : OX-TPA-WS2-6X6NW (20W)
Equipment : 1 x LED 20 W / 2400 lm

5 Kitchen

5.1 Summary, Kitchen, Light scene 1(C)

5.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	10800.00 lm
Total power	90.0 W
Total power per area (12.67 m²)	7.10 W/m² (1.47 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	483 lx	214 lx
E_{min}	331 lx	168 lx
$E_{min}/\bar{E}_m$ (U_o)	0.69	0.79
E_{min}/E_{max} (U_d)	0.57	
E_z/E_h		0.36
Position	0.75 m	0.75 m
R_{UG} (2.6H 3.7H)	<=18.3	

Luminaire :
(OX-TPA-WS2-6X6NW (30W), LED, , 30.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.7 (Ceiling)	113 lx	0.83
M 1.2 (Wall)	346 lx	0.54
M 1.3 (Wall)	348 lx	0.60
M 1.4 (Wall)	303 lx	0.53
M 1.5 (Wall)	232 lx	0.62
M 1.6 (Wall)	219 lx	0.72

5 Kitchen

5.1 Summary, Kitchen, Light scene 1(C)

5.1.1 Result overview, Evaluation area 1

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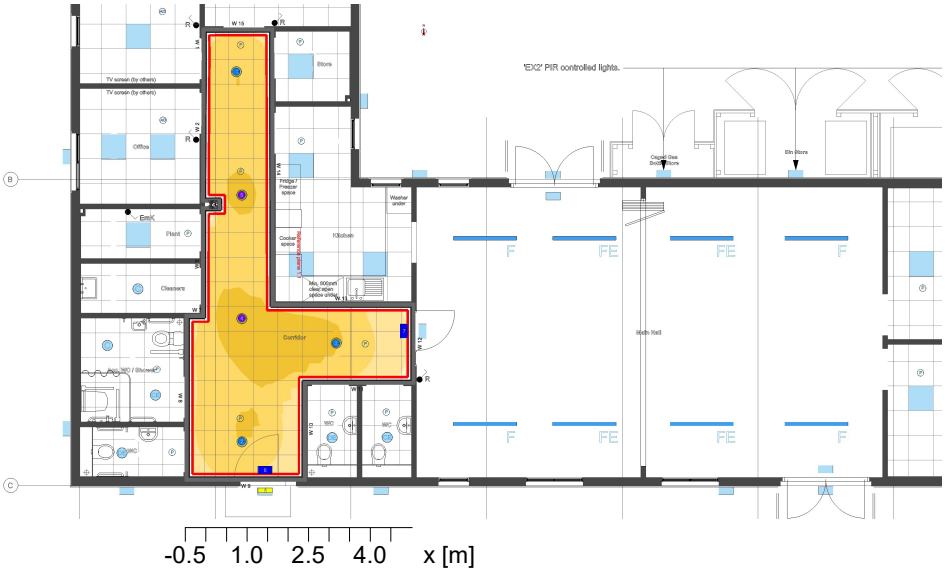
7 2 x Order No. :
Luminaire name : OX-TPA-WS2-6X6NW (30W)
Equipment : 1 x LED 30 W / 3600 lm

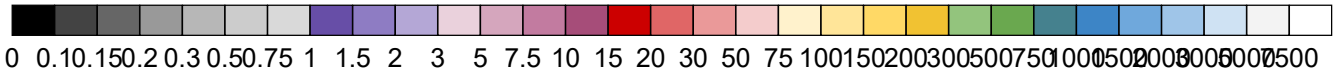
8 1 x Order No. : !
Luminaire name : OX-TPA-WS2-6X6NW (30W) EM
Equipment : 1 x LED 30 W / 3600 lm

6 Corridor

6.1 Summary, Corridor, Light scene 1(C)

6.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.85
Luminaire luminous flux	11595.55 lm
Total power	87.0 W
Total power per area (26.64 m²)	3.27 W/m² (1.80 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	181 lx	76 lx
E_{min}	101 lx	50 lx
$E_{min}/\bar{E}_m$ (U_o)	0.56	0.66
E_{min}/E_{max} (U_d)	0.43	
E_z/E_h		0.36
Position	0.00 m	0.00 m
R_{UG} (--- ---)	---	

Hints:
- Room dimensions deviate too much from a rectangular room.

Major surfaces	$\bar{E}_m$	U_o
M 1.17 (Ceiling)	54 lx	0.61
M 1.3 (Wall)	153 lx	0.64
M 1.7 (Wall)	130 lx	0.69
M 1.9 (Wall)	127 lx	0.65
M 1.10 (Wall)	170 lx	0.55
M 1.11 (Wall)	115 lx	0.68

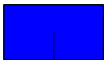
6 Corridor

6.1 Summary, Corridor, Light scene 1(C)

6.1.1 Result overview, Evaluation area 1

M 1.12 (Wall)	151 lx	0.47
M 1.13 (Wall)	96 lx	0.66
M 1.14 (Wall)	150 lx	0.50
M 1.15 (Wall)	158 lx	0.55
M 1.16 (Wall)	184 lx	0.59

Type No.\Make

11 2 x

Order No. :
Luminaire name : QBOX
Equipment : 1 x LED 1 W / 60 lm

Qvis

9 2 x

Order No. : 1
Luminaire name : H65-PRO-WS-180TC (17W)
Equipment : 1 x LED 17 W / 2295 lm

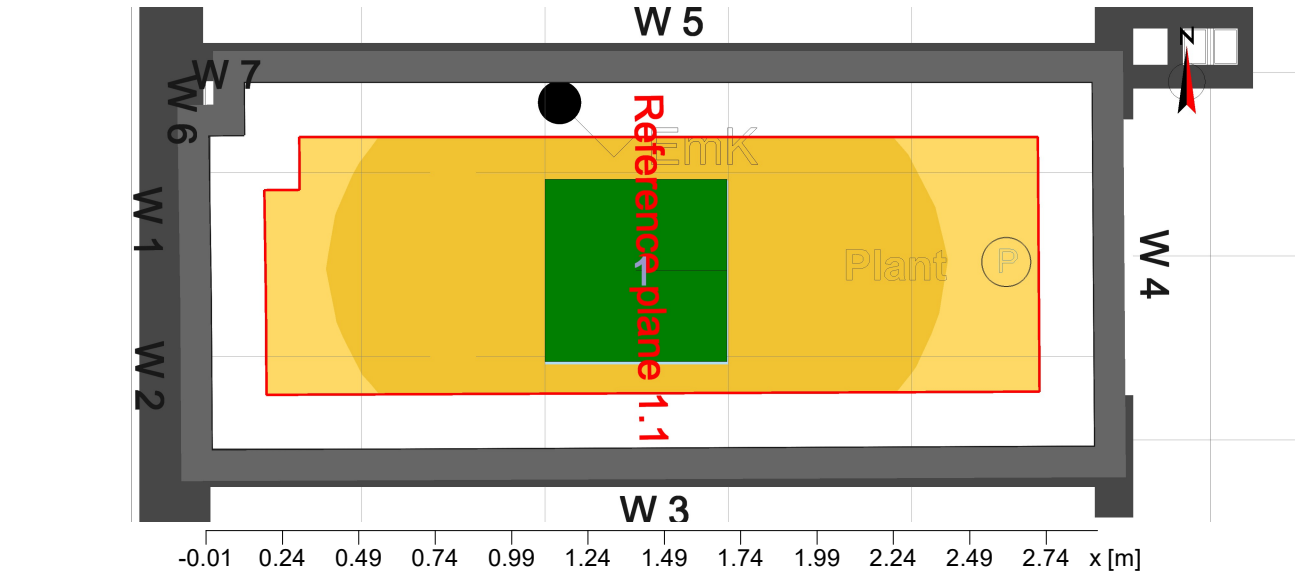
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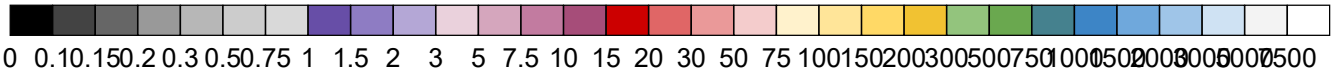
Order No. : !1
Luminaire name : H65-PRO-WS-180TC (17W) EM
Equipment : 1 x LED 17 W / 2295 lm

7 Plant

7.1 Summary, Plant, Light scene 1(C)

7.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	3600.00 lm
Total power	30.0 W
Total power per area (3.44 m²)	8.72 W/m² (3.94 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	221 lx	83 lx
E_{min}	170 lx	75 lx
$E_{min}/\bar{E}_m$ (U_o)	0.77	0.90
E_{min}/E_{max} (U_d)	0.67	
E_z/E_h		0.28
Position	0.00 m	0.00 m
R_{UG} (0.9H 2.3H)	<=16.6	

Luminaire :
(OX-TPA-WS2-6X6NW (30W) EM, LED, !, 30.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.82 (Ceiling)	129 lx	0.61
M 1.80 (Wall)	287 lx	0.40
M 1.81 (Wall)	292 lx	0.39

7 Plant

7.1 Summary, Plant, Light scene 1(C)

7.1.1 Result overview, Evaluation area 1

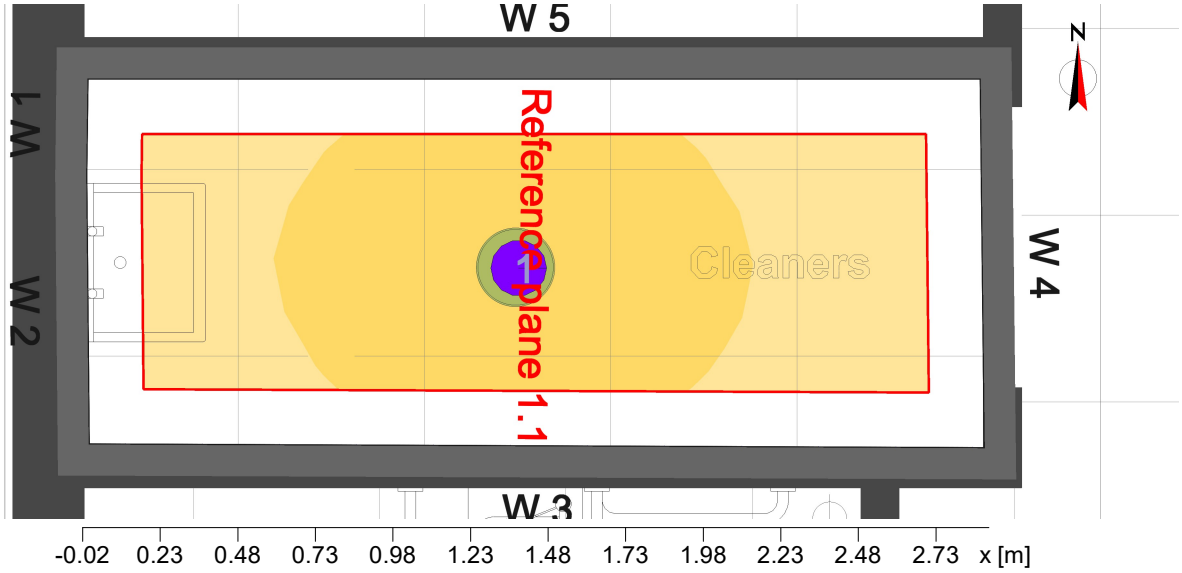
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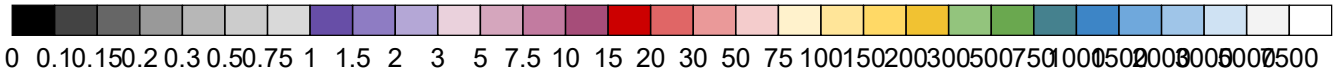
8 1 x Order No. : !
Luminaire name : OX-TPA-WS2-6X6NW (30W) EM
Equipment : 1 x LED 30 W / 3600 lm

8 Cleaners

8.1 Summary, Cleaners, Light scene 1(C)

8.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	2295.00 lm
Total power	17.0 W
Total power per area (3.41 m²)	4.99 W/m² (3.33 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	150 lx	55 lx
E_{min}	112 lx	46 lx
$E_{min}/\bar{E}_m$ (U_o)	0.75	0.84
E_{min}/E_{max} (U_d)	0.64	
E_z/E_h		0.28
Position	0.00 m	0.00 m
R_{UG} (0.9H 2.2H)	<=23.5	

Luminaire :
(H65-PRO-WS-180TC (17W), LED, 1, 17.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.8 (Ceiling)	79 lx	0.59
M 1.6 (Wall)	192 lx	0.39
M 1.7 (Wall)	190 lx	0.40

8 Cleaners

8.1 Summary, Cleaners, Light scene 1(C)

8.1.1 Result overview, Evaluation area 1

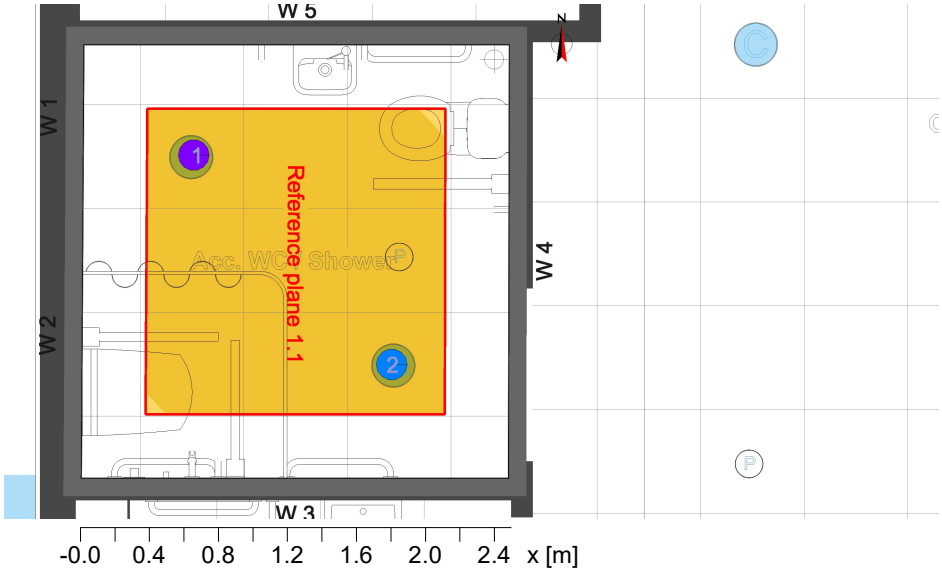
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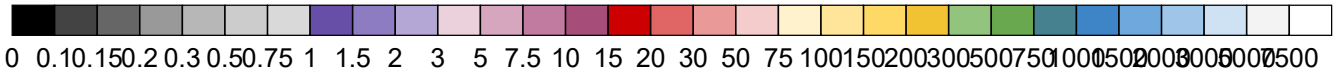
		Qvis	
9	1 x	Order No.	: 1
		Luminaire name	: H65-PRO-WS-180TC (17W)
		Equipment	: 1 x LED 17 W / 2295 lm

9 Acc WC-Shower

9.1 Summary, Acc WC-Shower, Light scene 1(C)

9.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	4590.00 lm
Total power	34.0 W
Total power per area (6.22 m²)	5.46 W/m² (2.19 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	250 lx	97 lx
E_{min}	210 lx	86 lx
$E_{min}/\bar{E}_m$ (U_o)	0.84	0.88
E_{min}/E_{max} (U_d)	0.77	
E_z/E_h		0.31
Position	0.00 m	0.00 m
R_{UG} (1.9H 2.0H)	10.0	

Luminaire :
(H65-PRO-WS-180TC (17W), LED, 1, 17.0 W)
Hints:
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces	$\bar{E}_m$	U_o
M 1.7 (Ceiling)	94 lx	0.78
M 1.3 (Wall)	177 lx	0.60
M 1.4 (Wall)	233 lx	0.58
M 1.5 (Wall)	227 lx	0.59

9 Acc WC-Shower

9.1 Summary, Acc WC-Shower, Light scene 1(C)

9.1.1 Result overview, Evaluation area 1

M 1.6 (Wall)	231 lx	0.57

Type No.\Make

Qvis

9 1 x

Order No. : 1
Luminaire name : H65-PRO-WS-180TC (17W)
Equipment : 1 x LED 17 W / 2295 lm

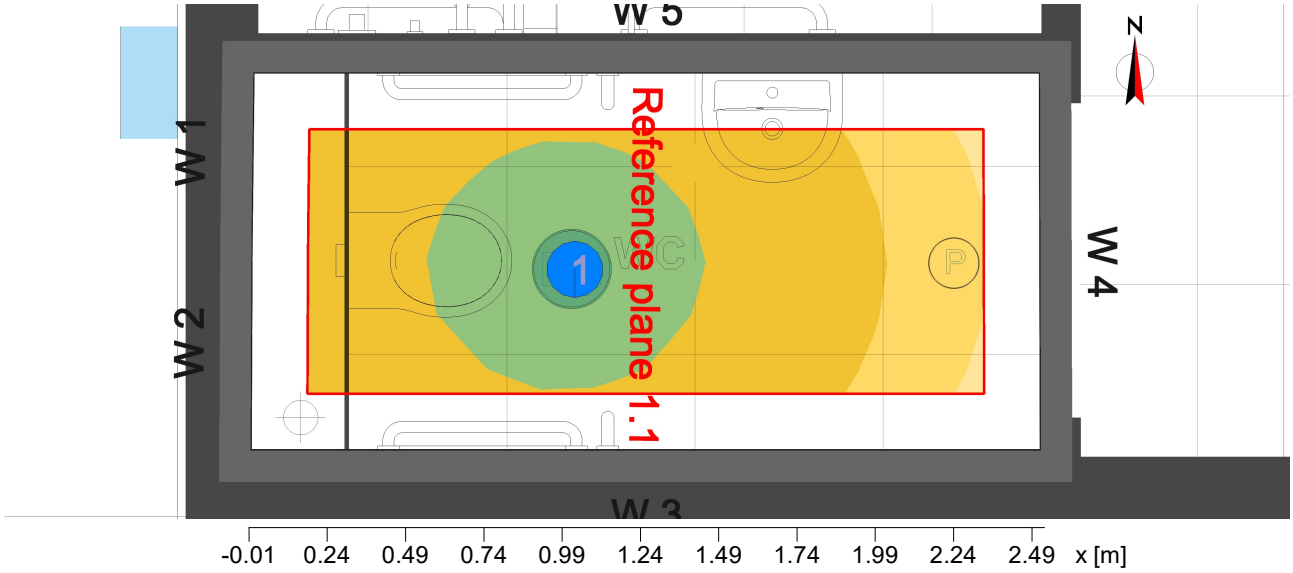
10 1 x

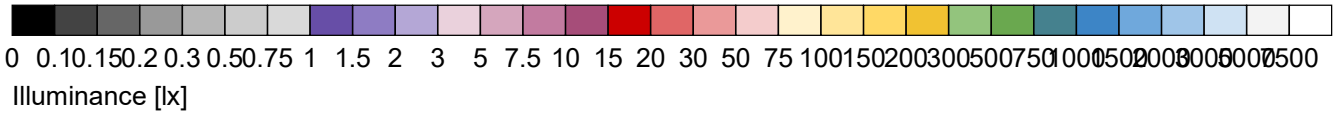
Order No. : !1
Luminaire name : H65-PRO-WS-180TC (17W) EM
Equipment : 1 x LED 17 W / 2295 lm

10 WC

10.1 Summary, WC, Light scene 1(C)

10.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	2295.00 lm
Total power	17.0 W
Total power per area (3.03 m²)	5.61 W/m² (2.14 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	262 lx	109 lx
E_{min}	153 lx	87 lx
$E_{min}/\bar{E}_m$ (U_o)	0.58	0.80
E_{min}/E_{max} (U_d)	0.46	
E_z/E_h		0.29
Position	0.75 m	0.75 m
R_{UG} (2.0H 0.9H)	10.0	

Luminaire :
(H65-PRO-WS-180TC (17W) EM, LED, !1, 17.0 W)
Hints:
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	88 lx	0.57
M 1.3 (Wall)	209 lx	0.37
M 1.5 (Wall)	208 lx	0.38

10 WC

10.1 Summary, WC, Light scene 1(C)

10.1.1 Result overview, Evaluation area 1

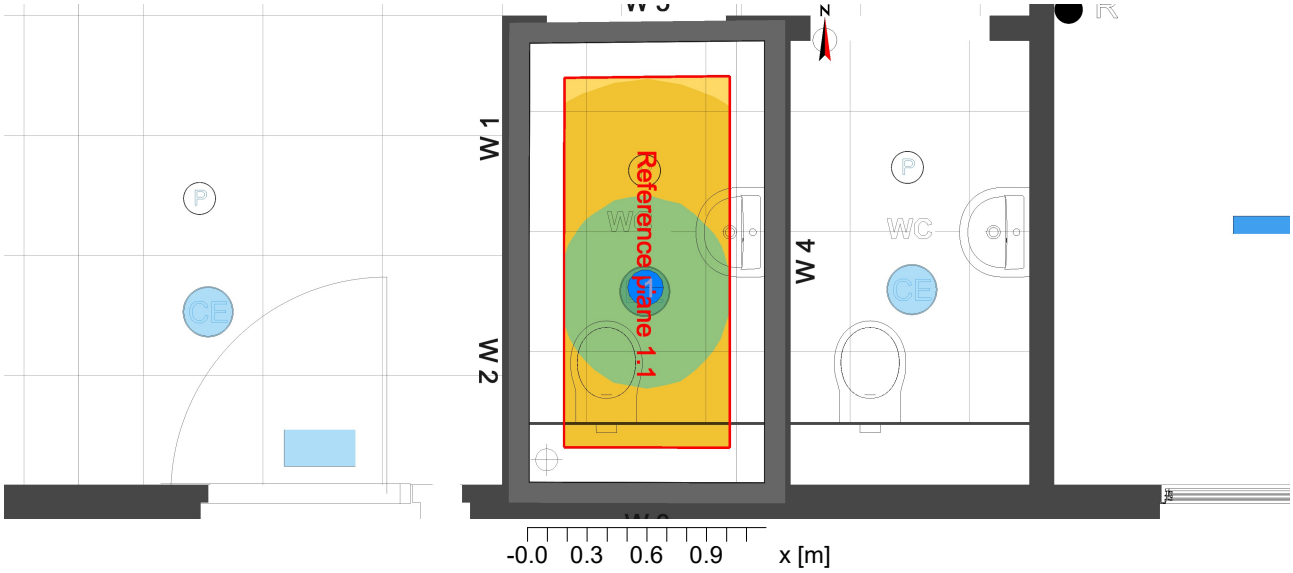
Type No.\Make

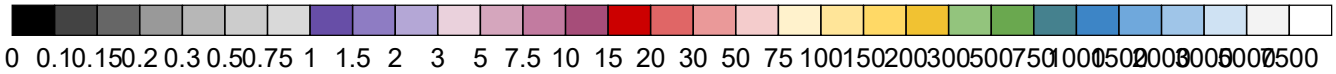
		Qvis	
10	1 x	Order No.	: !1
		Luminaire name	: H65-PRO-WS-180TC (17W) EM
		Equipment	: 1 x LED 17 W / 2295 lm

11 WC

11.1 Summary, WC, Light scene 1(C)

11.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	2295.00 lm
Total power	17.0 W
Total power per area (2.63 m²)	6.47 W/m² (2.28 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	284 lx	118 lx
E_{min}	196 lx	92 lx
$E_{min}/\bar{E}_m$ (U_o)	0.69	0.79
E_{min}/E_{max} (U_d)	0.57	
E_z/E_h		0.29
Position	0.75 m	0.75 m
R_{UG} (0.9H 1.7H)	10.0	

Luminaire :
(H65-PRO-WS-180TC (17W) EM, LED, !1, 17.0 W)
Hints:
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	100 lx	0.66
M 1.4 (Wall)	227 lx	0.38

11 WC

11.1 Summary, WC, Light scene 1(C)

11.1.1 Result overview, Evaluation area 1

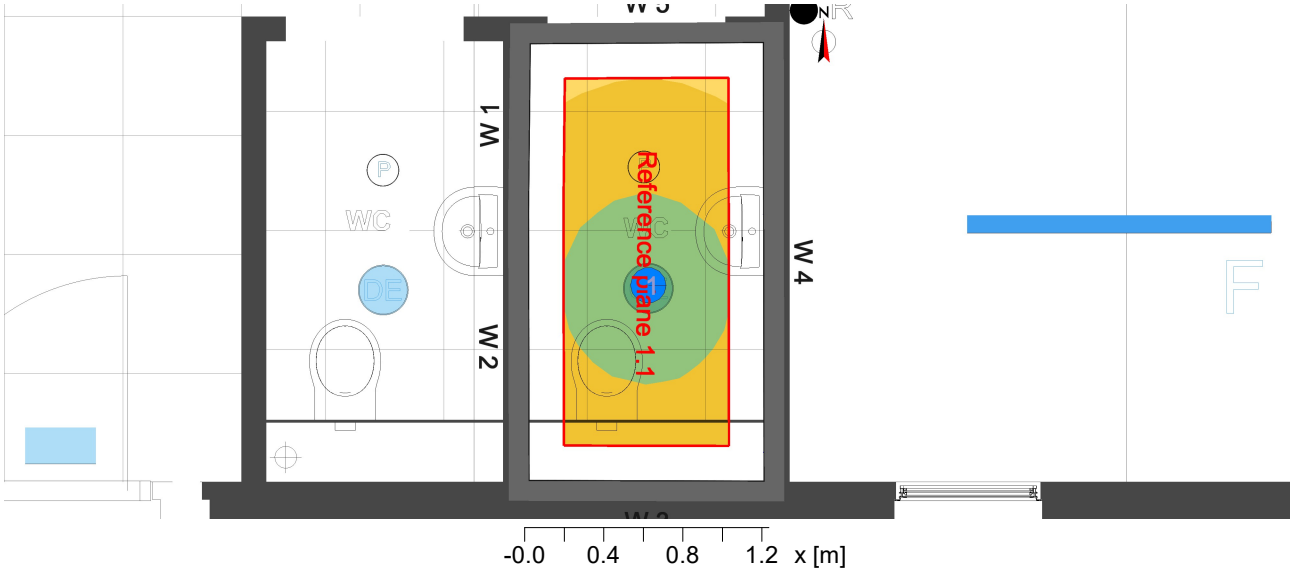
Type No.\Make

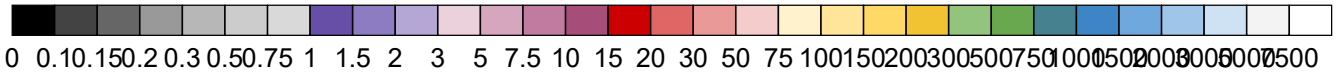
		Qvis	
10	1 x	Order No.	: !1
		Luminaire name	: H65-PRO-WS-180TC (17W) EM
		Equipment	: 1 x LED 17 W / 2295 lm

12 WC

12.1 Summary, WC, Light scene 1(C)

12.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	2295.00 lm
Total power	17.0 W
Total power per area (2.64 m²)	6.44 W/m² (2.27 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	284 lx	118 lx
E_{min}	198 lx	92 lx
$E_{min}/\bar{E}_m$ (U_o)	0.70	0.79
E_{min}/E_{max} (U_d)	0.58	
E_z/E_h		0.29
Position	0.75 m	0.75 m
R_{UG} (0.9H 1.7H)	10.0	

Luminaire :
(H65-PRO-WS-180TC (17W) EM, LED, !1, 17.0 W)
Hints:
- Encountered room dimensions less than 2H. RUG value has been set to 10 as lower limit.

Major surfaces	$\bar{E}_m$	U_o
M 1.5 (Ceiling)	99 lx	0.67
M 1.4 (Wall)	229 lx	0.38

12 WC

12.1 Summary, WC, Light scene 1(C)

12.1.1 Result overview, Evaluation area 1

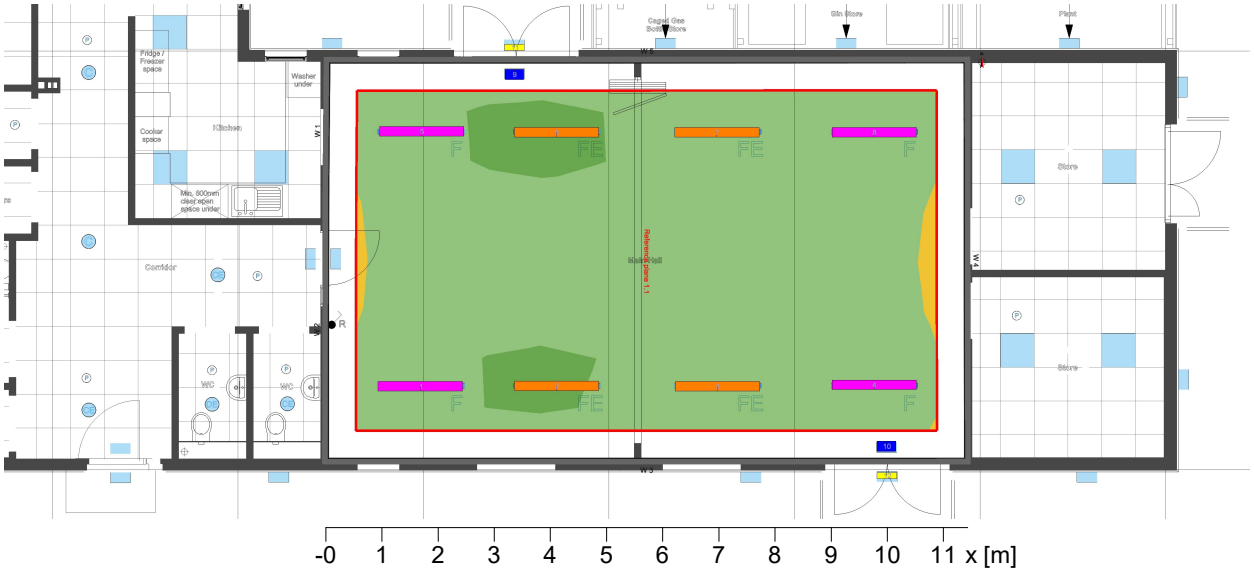
Type No.\Make

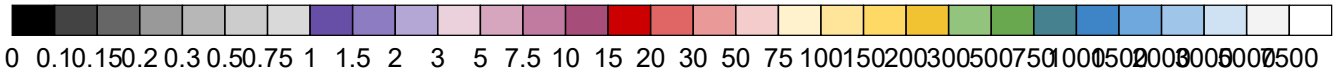
		Qvis	
10	1 x	Order No.	: !1
		Luminaire name	: H65-PRO-WS-180TC (17W) EM
		Equipment	: 1 x LED 17 W / 2295 lm

13 Main Hall

13.1 Summary, Main Hall, Light scene 1(C)

13.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.85
Total lamp luminous flux	51320.00 lm
Luminaire luminous flux	51306.02 lm
Total power	322.0 W
Total power per area (79.76 m²)	4.04 W/m² (0.92 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	439 lx	185 lx
E_{min}	311 lx	144 lx
$E_{min}/\bar{E}_m$ (U_o)	0.71	0.78
E_{min}/E_{max} (U_d)	0.59	
E_z/E_h		0.39
Position	0.75 m	0.75 m
R_{UG} (3.0H 4.8H)	<=18.8	

Luminaire :
(EDUPAC-PROUGR-WS-1500TC (40W), LED, 1, 40.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	99 lx	0.82
M 1.1 (Wall)	243 lx	0.69
M 1.2 (Wall)	213 lx	0.56
M 1.3 (Wall)	286 lx	0.62
M 1.4 (Wall)	215 lx	0.52
M 1.5 (Wall)	291 lx	0.60

13 Main Hall

13.1 Summary, Main Hall, Light scene 1(C)

13.1.1 Result overview, Evaluation area 1

Type No.\Make

11 2 x

Order No. :
Luminaire name : QBOX
Equipment : 1 x LED 1 W / 60 lm

Qvis

13 4 x

Order No. : 1
Luminaire name : EDUPAC-PROUGR-WS-1500TC (40W)
Equipment : 1 x LED 40 W / 6400 lm

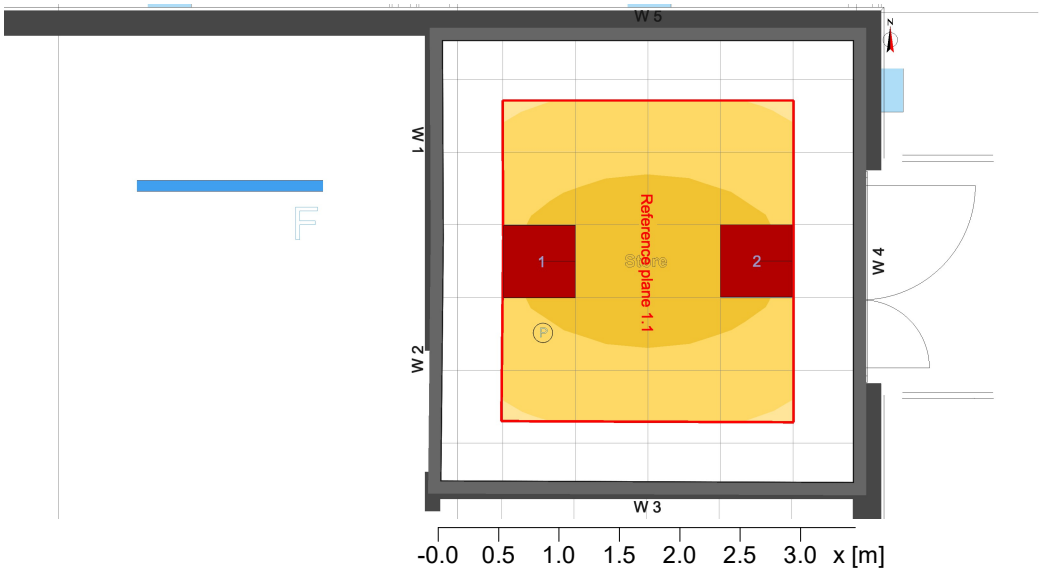
14 4 x

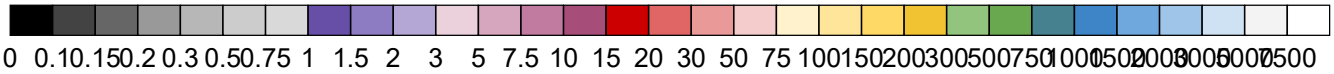
Order No. : !1
Luminaire name : EDUPAC-PROUGR-WS-1500TC (40W) EM
Equipment : 1 x LED 40 W / 6400 lm

14 Store

14.1 Summary, Store, Light scene 1(C)

14.1.1 Result overview, Evaluation area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	4800.00 lm
Total power	40.0 W
Total power per area (12.44 m²)	3.21 W/m² (1.67 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	192 lx	76 lx
E_{min}	156 lx	67 lx
$E_{min}/\bar{E}_m$ (U_o)	0.81	0.88
E_{min}/E_{max} (U_d)	0.70	
E_z/E_h		0.33
Position	0.00 m	0.00 m
R_{UG} (2.8H 2.7H)	<=16.8	

Luminaire :
(OX-TPA-WS2-6X6NW (20W), LED, , 20.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.6 (Ceiling)	53 lx	0.92
M 1.1 (Wall)	126 lx	0.54
M 1.2 (Wall)	150 lx	0.49
M 1.3 (Wall)	120 lx	0.81
M 1.4 (Wall)	161 lx	0.59
M 1.5 (Wall)	120 lx	0.81

14 Store

14.1 Summary, Store, Light scene 1(C)

14.1.1 Result overview, Evaluation area 1

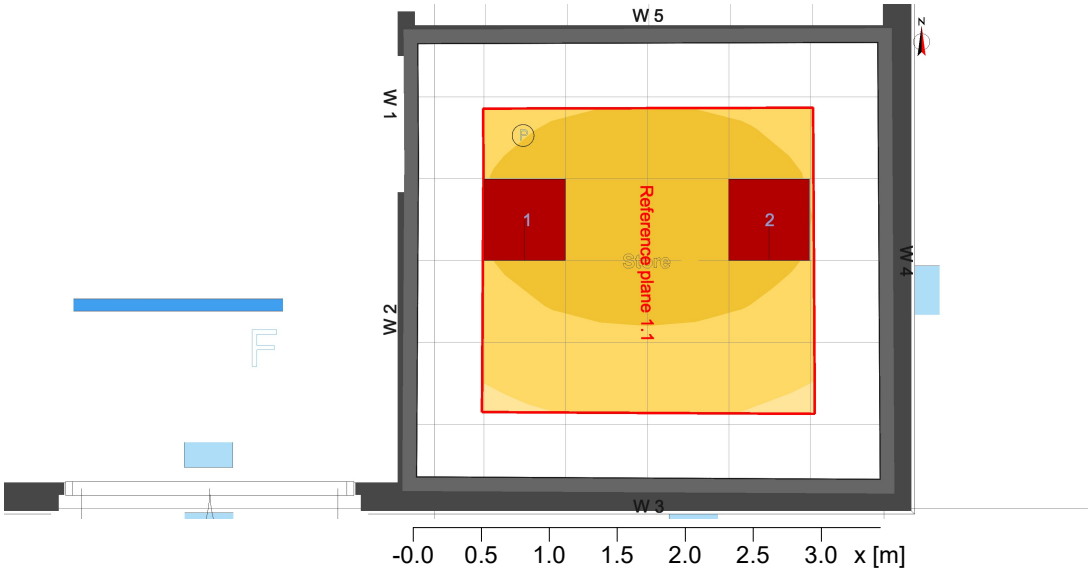
Type No.\Make

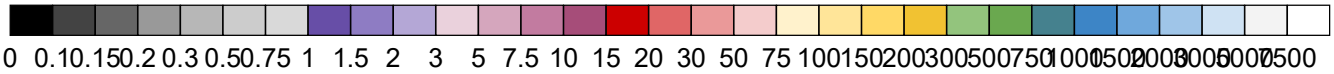
5 2 x Order No. :
Luminaire name : OX-TPA-WS2-6X6NW (20W)
Equipment : 1 x LED 20 W / 2400 lm

15 Store

15.1 Summary, Store , Light scene 1(C)

15.1.1 Result overview, Evaluation area 1





General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.50 m
Maintenance factor	0.85
Luminaire luminous flux	4800.00 lm
Total power	40.0 W
Total power per area (10.86 m²)	3.68 W/m² (1.84 W/m²/100lx)

Evaluation area 1	**Reference plane 1.1**	
	Horizontal	cylindrical
$\bar{E}_m$	200 lx	79 lx
E_{min}	150 lx	71 lx
$E_{min}/\bar{E}_m$ (U_o)	0.75	0.90
E_{min}/E_{max} (U_d)	0.65	
E_z/E_h		0.33
Position	0.00 m	0.00 m
R_{UG} (2.5H 2.7H)	<=15.8	

Luminaire :
(OX-TPA-WS2-6X6NW (20W), LED, , 20.0 W)

Major surfaces	$\bar{E}_m$	U_o
M 1.7 (Ceiling)	59 lx	0.84
M 1.3 (Wall)	164 lx	0.49
M 1.4 (Wall)	121 lx	0.79
M 1.5 (Wall)	174 lx	0.51
M 1.6 (Wall)	167 lx	0.74

15 Store

15.1 Summary, Store , Light scene 1(C)

15.1.1 Result overview, Evaluation area 1

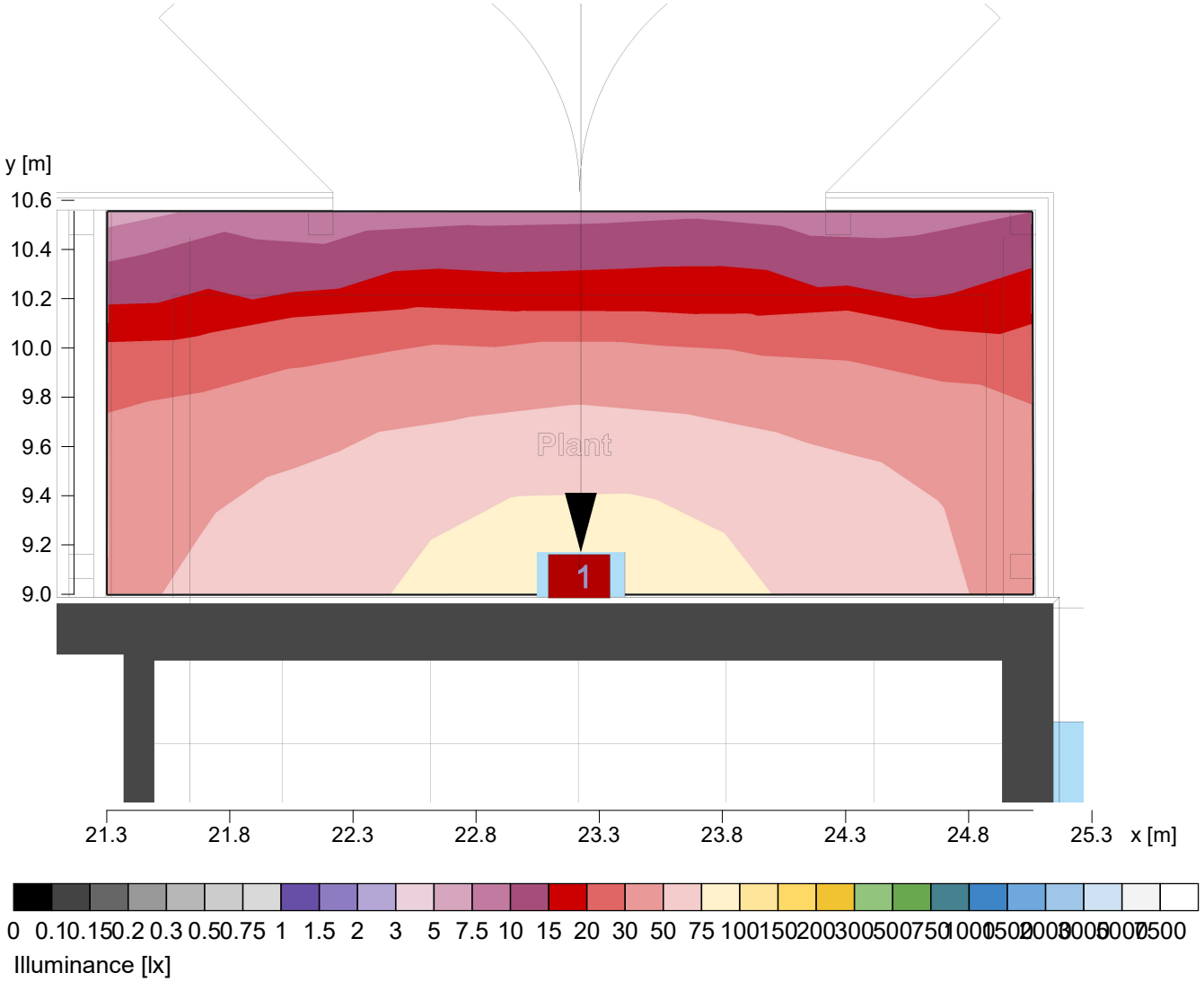
Type No.\Make

5 2 x Order No. :
Luminaire name : OX-TPA-WS2-6X6NW (20W)
Equipment : 1 x LED 20 W / 2400 lm

1 External Plant

1.1 Calculation results, External Plant, Light scene 1(C)

1.1.1 Pseudo colours, Floor (E)

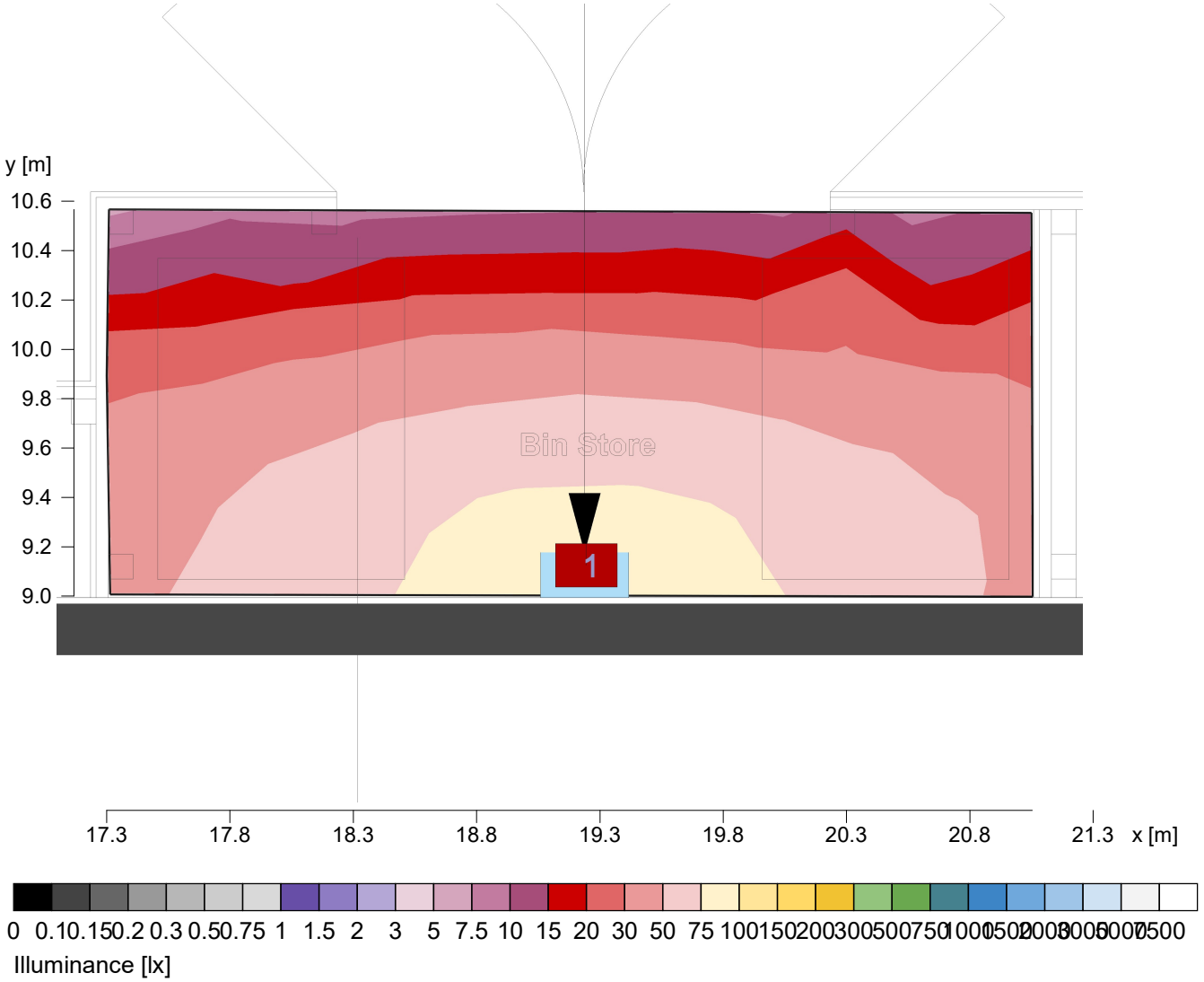


Average illuminance	$\bar{E}_m$	: 40 lx
Minimum illuminance	E_{min}	: 7.32 lx
Maximum illuminance	E_{max}	: 80 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 5.45 (0.18)

2 External Bin Store

2.1 Calculation results, External Bin Store, Light scene 1(C)

2.1.1 Pseudo colours, Floor (E)

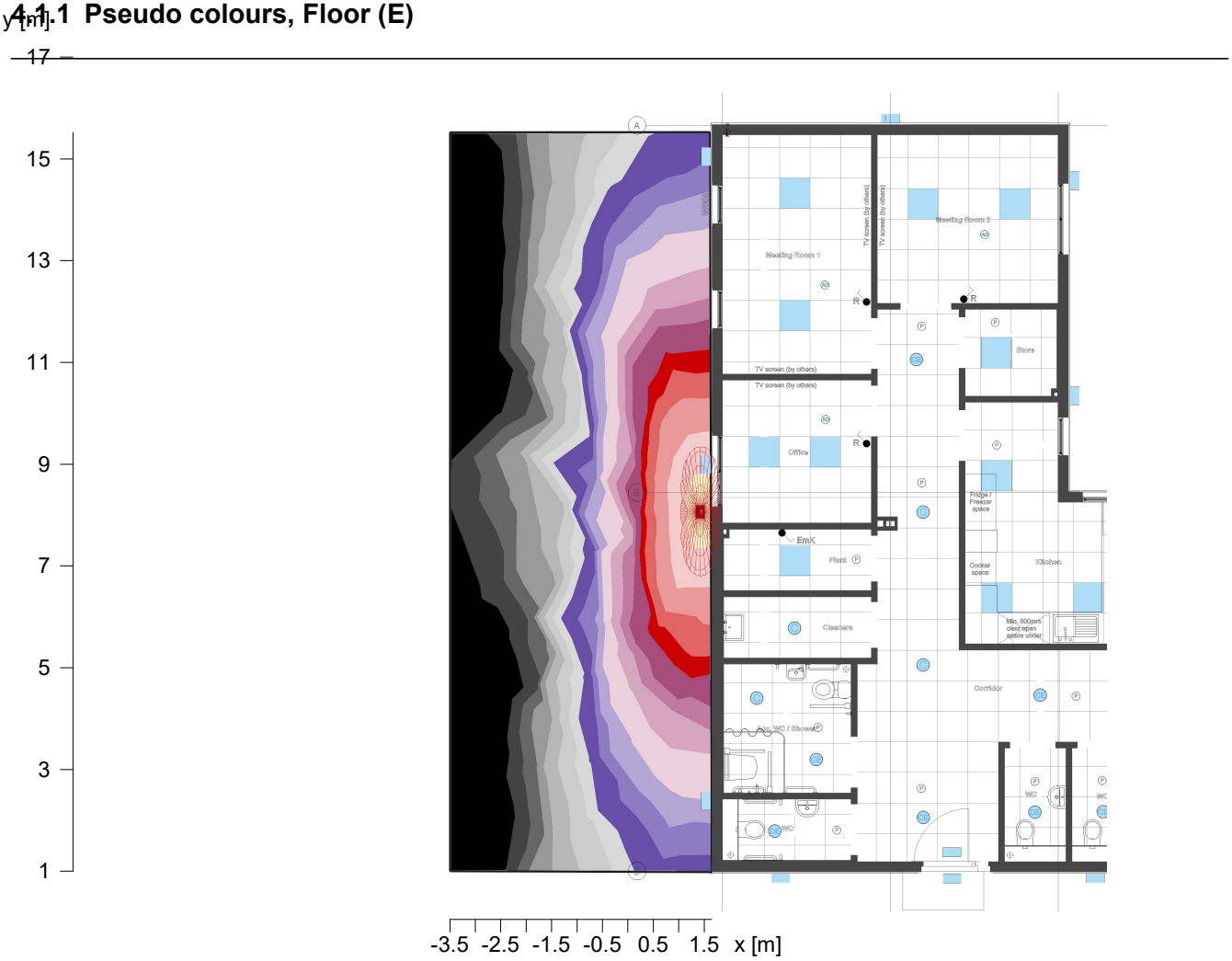


Average illuminance	$\bar{E}_m$	: 43 lx
Minimum illuminance	E_{min}	: 15.2 lx
Maximum illuminance	E_{max}	: 80 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 2.81 (0.36)

4 External Building LHS

4.1 Calculation results, External Building LHS, Light scene 1(C)

4.1.1 Pseudo colours, Floor (E)

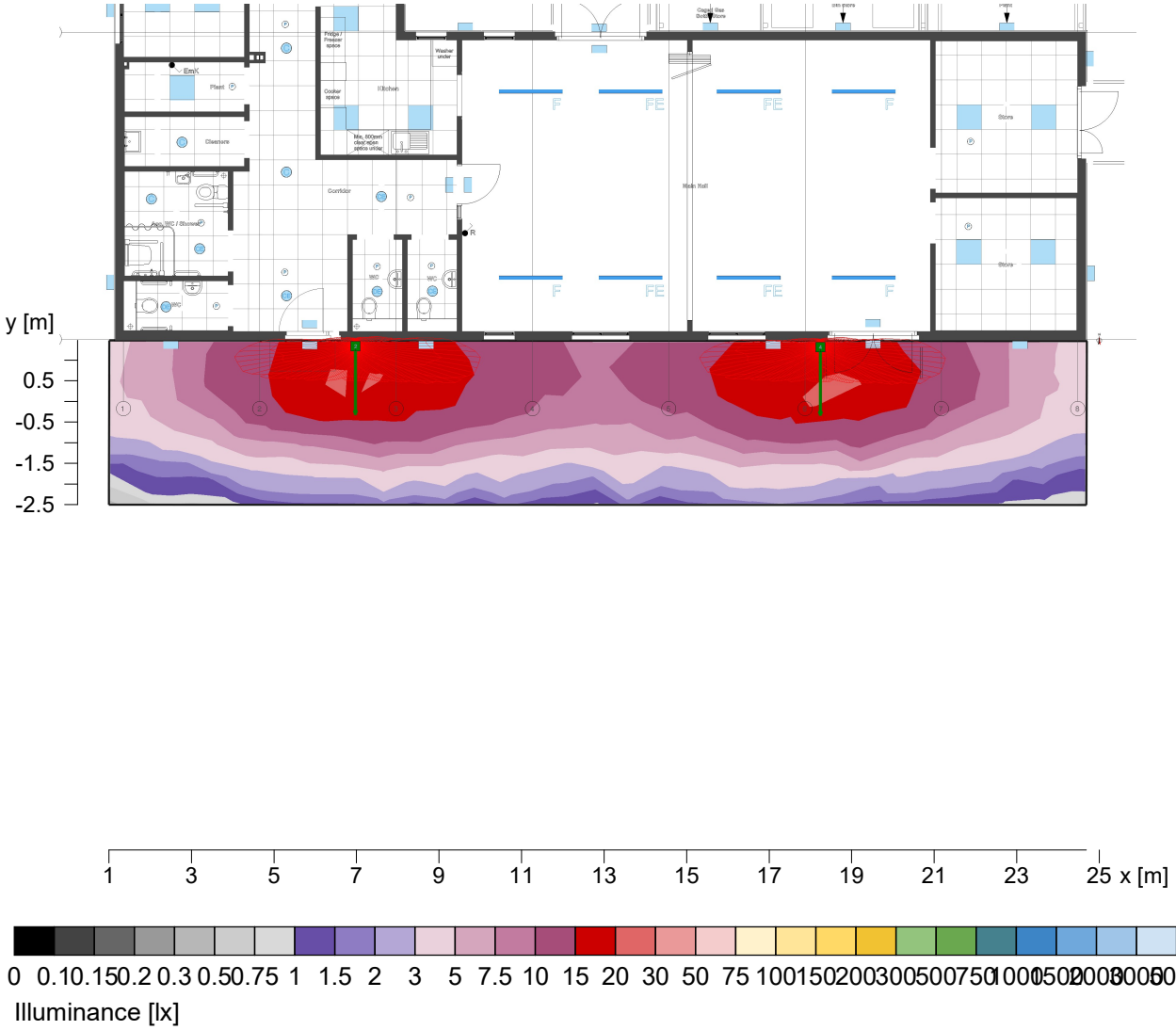


Average illuminance	$\bar{E}_m$	: 4.54 lx
Minimum illuminance	E_{min}	: 0.02 lx
Maximum illuminance	E_{max}	: 67 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 237.41 (0.00)

5 External Building Front

5.1 Calculation results, External Building Front, Light scene 1(C)

5.1.1 Pseudo colours, Floor (E)

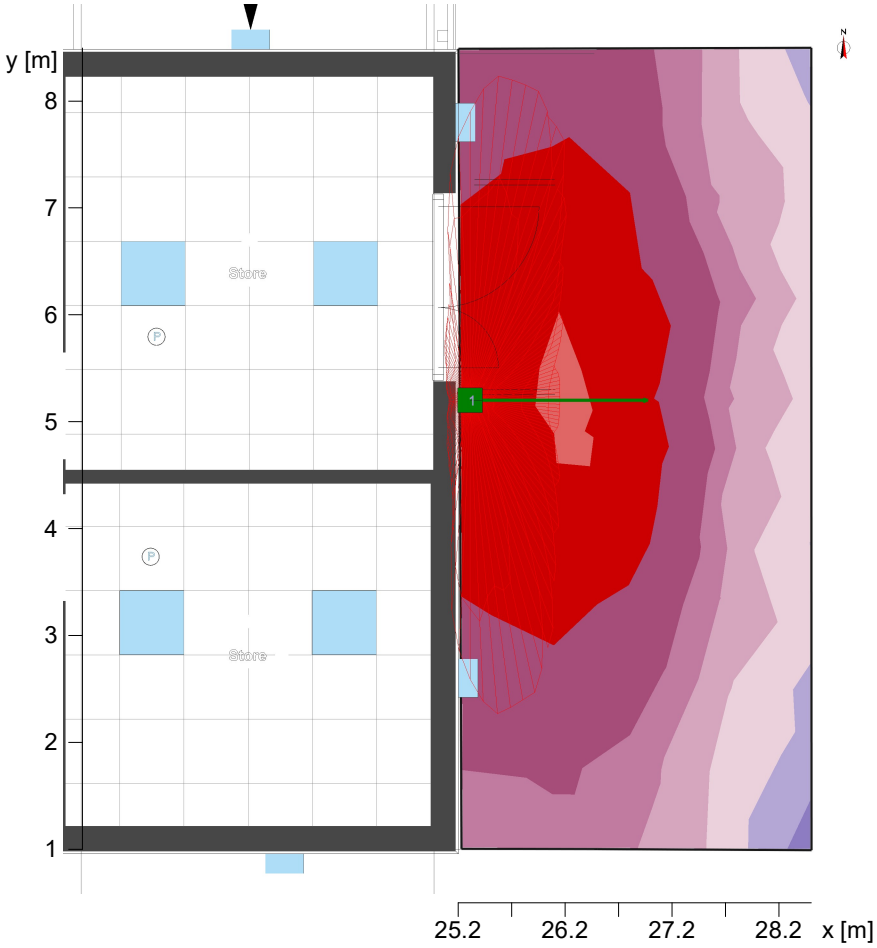


Average illuminance	$\bar{E}_m$	: 8.89 lx
Minimum illuminance	E_{min}	: 0.77 lx
Maximum illuminance	E_{max}	: 20 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 11.55 (0.09)

6 External Building RHS

6.1 Calculation results, External Building RHS, Light scene 1(C)

6.1.1 Pseudo colours, Floor (E)





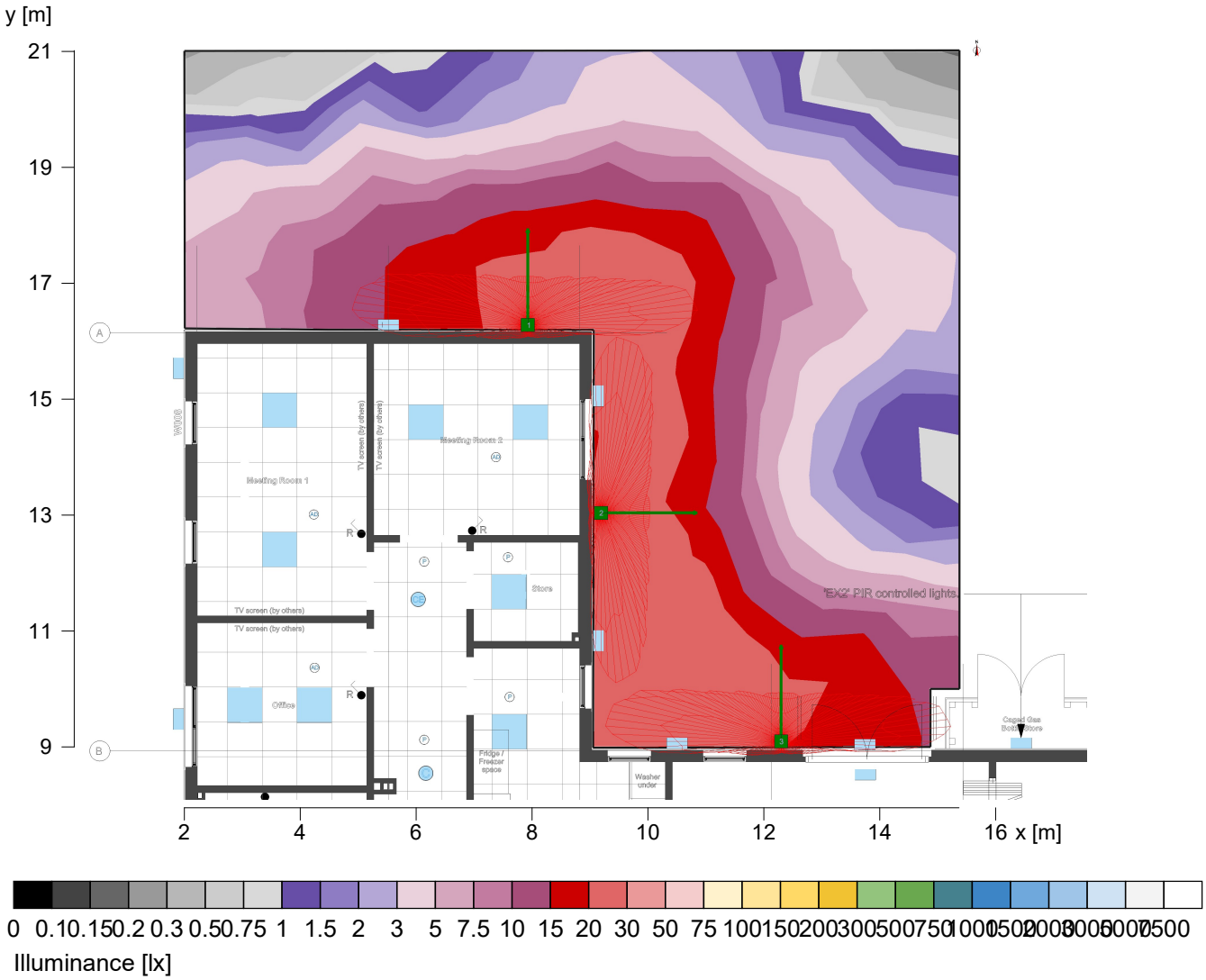
Illuminance [lx]

Average illuminance	$\bar{E}_m$	: 11.6 lx
Minimum illuminance	E_{min}	: 1.55 lx
Maximum illuminance	E_{max}	: 21 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 7.51 (0.13)

7 External Building Rear

7.1 Calculation results, External Building Rear, Light scene 1(C)

7.1.1 Pseudo colours, Floor (E)



Average illuminance	$\bar{E}_m$	: 9.67 lx
Minimum illuminance	E_{min}	: 0.18 lx
Maximum illuminance	E_{max}	: 26 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 53.21 (0.02)