Proposed New Build At The Glenview Hotel

Installation :

Project number : GH2021
Customer : Glenview Hotel
Processed by : Billy Kendrick
Date : 03.08.2021

Project description:
A study to work out the illumination from the proposed new build and how this additional lighting may impact on the environment.

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1.1.1 Data sheet

Manufacturer: Kosnic

KBHDDC6S65-WHT w/ KLED12STD/4P-W27 Ceiling / wall-mounted luminaires LED Surface Bulkhead - Blanca + DD
IP65 Blanca Bulkhead (White Trim) w/ 12w LED DD (2700k)

Overview

Kosnic's IP65 LED bulkhead for LED DD lamps offers a low maintenance and robust solution to lighting in corridors, staircases, security zones, thoroughfares, bedrooms and other areas where a practical lighting solution is required. The standard bulkhead can be used as a utility style bulkhead without a trim or can be enhanced with one of the decorative trims to give a higher aesthetic appeal where required.

Kosnic's range of LED DD lamps take a fresh approach to functional lighting with a design philosophy offering plug-in emergency packs and optional microwave sensor versions so that there are no barriers to retrofitting LEDs in commercial fittings. The products bring the energy saving capabilities of LED technology to the commercial environment and the lamps can quickly replace fluorescent DD lamps with little or no rewiring.

Features

• Choice of decorative trims
• Compatible with Kosnic's emergency modules
• Class II
• IP65
• IK10
• Save energy up to 65% compared with a fluorescent DD lamp with magnetic ballast.
• For maximum energy savings, bypass all control gear and supply directly from the mains.
• Single side high lumen output for light only where it is needed.
• Long life of 30,000h.
• Compatible with Kosnic's emergency modules.
• Instant start.
• Negligible UV output.
• Mercury free.

Emergency Module Compatible

The standard and self-test Kosnic emergency modules can be fitted into the bulkhead. These modules provide power to the Kosnic LED DD lamps for over 3 hours at a reduced output in the event of a cut in the supply and must be wired to an un-switched supply.

Compatible Emergency Module = CEC02LBL/N or CEC03LBL/S
Emergency Luminous Flux = 105lm* (CEC02LBL/N) or 135lm (CEC03LBL/S)

*Bulkhead LOR (68%) applied.

Please see datasheet or website for further info.

1 Luminaire data

1.1 Kosnic, LED Surface Bulkhead -... (KBHDDC6S65-WHT ...)

1.1.1 Data sheet

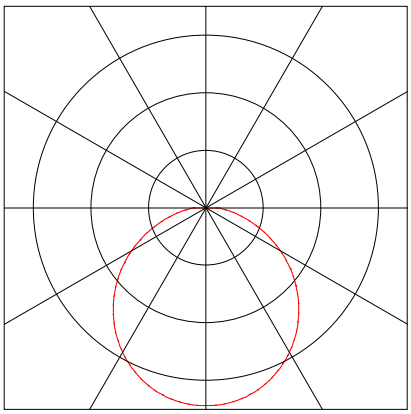
Luminaire data

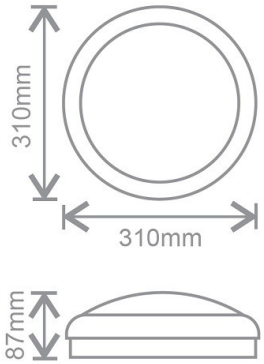
Absolute Photometry		
Luminaire efficacy	:	77.5 lm/W
Classification	:	A40 ↓99.9% ↑0.1%
CIE Flux Codes	:	46 77 94 100 100
UGR 4H 8H	:	22.2 / 22.2
Control gear	:	Electronic ballast
Power	:	12 W
Luminous flux	:	930 lm

Dimensions : Ø340 mm x 87 mm

Equipped with

Quantity	:	1
Designation	:	LED
Colour	:	2700K
Socket	:	-
Colour reproduction	:	83





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1.1 Kosnic, LED Surface Bulkhead -... (KBHDDC6S65-WHT ...)

1.1.2 Glare Rating (UGR)

Reflectance of											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Walls		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Floor		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimension		Viewed crosswise					Viewed endwise				
x	y										
2H	2H	17.6	19.3	18.0	19.6	19.9	17.6	19.3	18.0	19.6	19.9
	3H	19.3	20.8	19.7	21.1	21.5	19.3	20.8	19.7	21.1	21.5
	4H	20.0	21.4	20.4	21.8	22.1	20.0	21.4	20.4	21.8	22.1
	6H	20.7	22.0	21.1	22.3	22.7	20.7	22.0	21.1	22.3	22.7
	8H	20.9	22.2	21.3	22.6	23.0	20.9	22.2	21.3	22.6	23.0
	12H	21.2	22.4	21.6	22.8	23.2	21.2	22.4	21.6	22.8	23.2
4H	2H	18.4	19.8	18.8	20.2	20.5	18.4	19.8	18.8	20.2	20.5
	3H	20.2	21.4	20.6	21.8	22.2	20.2	21.4	20.6	21.8	22.2
	4H	21.1	22.2	21.5	22.6	23.0	21.1	22.2	21.5	22.6	23.0
	6H	21.9	22.8	22.3	23.3	23.7	21.9	22.8	22.3	23.3	23.7
	8H	22.2	23.1	22.7	23.6	24.0	22.2	23.1	22.7	23.6	24.0
	12H	22.6	23.5	23.1	23.9	24.4	22.6	23.5	23.1	23.9	24.4
8H	4H	21.4	22.4	21.9	22.8	23.3	21.4	22.4	21.9	22.8	23.3
	6H	22.4	23.2	22.9	23.6	24.1	22.4	23.2	22.9	23.6	24.1
	8H	22.9	23.6	23.4	24.1	24.6	22.9	23.6	23.4	24.1	24.6
	12H	23.4	24.0	24.0	24.5	25.0	23.4	24.0	24.0	24.5	25.0
12H	4H	21.5	22.4	22.0	22.8	23.3	21.5	22.4	22.0	22.8	23.3
	6H	22.6	23.2	23.1	23.7	24.2	22.6	23.2	23.1	23.7	24.2
	8H	23.1	23.7	23.6	24.2	24.7	23.1	23.7	23.6	24.2	24.7

Distance between luminaires: 0.25

Manufacturer : Kosnic
Order number : KBHDDC6S65-WHT w/ KLED12STD
Luminaire name : LED Surface Bulkhead - Blanca + DD
Equipment : 1 x LED 12 W / 930 lm
Dimensions : D 340 mm x H 87 mm
File name : KBHDDC6S65-WHT (KLED12STD.4

Luminaire efficacy : 77.5 lm/W (A40)
Light distribution : rotationally symmetric
Beam Angle : 111.7° C0-C180

1 Luminaire data

1.2 iGuzzini, Laser Blade InOut - wall (E877)

1.2.1 Data sheet

Manufacturer: iGuzzini

E877 wall-mounted luminaire Laser Blade InOut - wall
E877 :
Dual optic element, outdoor rectangular, wall-mounted luminaire with Warm White LED lamps and a fixed Wide Flood optic. Consists of an optical assembly (rectangular), an upper base, a glass cover, and a wall plate. The optical assembly and upper cover are made of aluminium alloy and are subjected to a multi-step, pre-treatment process, in which the main phases are degreasing, fluorozirconation (a protective surface film) and sealing (with a nano-structured silane layer). The following painting stage consists of a primer and a liquid acrylic paint, cured at 150°C, with a high level of weather and UV ray resistance. Painted plastic cover guard. AISI 304 stainless steel wall fixing plate. The tempered sodium-calcium sealing glass is transparent, with black serigraphy on the edge, 3mm thick and joined to the optical assembly with silicone. There are silicone seals between the upper cover and the optical assembly too. Metallised, thermoplastic, high definition optic, integrated in a rear position in the black, anti-glare screen. Single cable entrance via black polyamide PG11 cable clamp, suitable for ø 6.5÷11mm cables. Connection with three fast-coupling terminals. Possibility to use unipolar cables with 2.4÷3.4mm diameter (1-2,5mm²) All external screws used are made of A2 stainless steel.

E877.047 - Wall-mounted Laser Blade InOut, Warm White LED, Wide Flood optic - 4.2W 350lm - 2700K - White/Black
A69Q - Lamp LED Warm White CRI>90

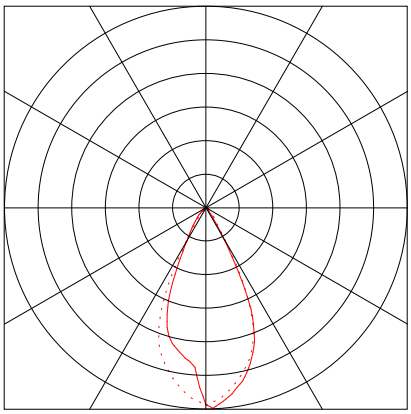
Luminaire data

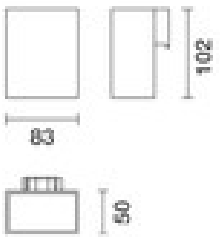
Luminaire efficiency	:	69%
Luminaire efficacy	:	42.37 lm/W
Classification	:	A70 ↓100.0% ↑0.0%
CIE Flux Codes	:	95 99 100 100 69
UGR 4H 8H	:	10.7 / 13.7
Control gear	:	Powersupply for LED
Power	:	5.7 W
Luminous flux	:	241.5 lm

Dimensions : 83 mm x 66 mm x 102 mm

Equipped with

Quantity	:	1
Designation	:	LED
Colour	:	2700K
Luminous flux	:	350 lm
Colour reproduction	:	95





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1.2 iGuzzini, Laser Blade InOut - wall (E877)

1.2.2 Glare Rating (UGR)

Reflectance of											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Walls		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Floor		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimension		Viewed crosswise					Viewed endwise				
x	y										
2H	2H	10.9	11.8	11.3	12.1	12.4	14.2	15.0	14.5	15.3	15.6
	3H	10.9	11.6	11.3	12.0	12.3	14.1	14.8	14.4	15.1	15.5
	4H	10.9	11.6	11.3	11.9	12.3	14.0	14.7	14.4	15.0	15.4
	6H	10.9	11.5	11.3	11.9	12.3	13.9	14.5	14.3	14.9	15.3
	8H	10.8	11.4	11.2	11.8	12.2	13.8	14.4	14.2	14.8	15.2
	12H	10.7	11.3	11.2	11.7	12.1	13.7	14.3	14.1	14.7	15.1
4H	2H	10.7	11.4	11.1	11.7	12.1	14.0	14.7	14.4	15.1	15.4
	3H	10.7	11.2	11.1	11.6	12.1	13.9	14.5	14.4	14.9	15.3
	4H	10.7	11.2	11.2	11.6	12.1	13.9	14.4	14.4	14.8	15.3
	6H	10.7	11.1	11.2	11.6	12.0	13.8	14.2	14.2	14.7	15.1
	8H	10.7	11.1	11.1	11.5	12.0	13.7	14.1	14.2	14.6	15.1
	12H	10.6	11.0	11.1	11.5	12.0	13.7	14.0	14.1	14.5	15.0
8H	4H	10.5	11.0	11.0	11.4	11.9	13.8	14.2	14.3	14.6	15.1
	6H	10.5	10.9	11.0	11.4	11.9	13.6	14.0	14.2	14.5	15.0
	8H	10.6	10.9	11.1	11.4	11.9	13.6	13.9	14.2	14.5	15.0
	12H	10.6	10.8	11.1	11.3	11.9	13.6	13.8	14.1	14.3	14.9
12H	4H	10.5	10.9	11.0	11.3	11.9	13.7	14.1	14.2	14.6	15.1
	6H	10.5	10.8	11.1	11.3	11.8	13.6	13.9	14.2	14.5	15.0
	8H	10.5	10.8	11.1	11.3	11.8	13.6	13.8	14.1	14.3	14.9

Distance between luminaires: 0.25

Due to missing symmetry characteristics the values apply only to the indicated line of sight.

Manufacturer	: iGuzzini	Efficiency factor	: 69%
Order number	: E877	Luminaire efficacy	: 42.37 lm/W (A70)
Luminaire name	: Laser Blade InOut - wall	Light distribution	: sym. to C0-C180
Equipment	: 1 x LED 5.7 W / 350 lm	Beam Angle	: 49.6° C90-C270
Dimensions	: L 83 mm x W 66 mm x H 102 mm		24.8° C0
File name	: E877_A69Q_1.ldt		21.9° C180

2 Room 1(Copy of)

2.1 Description, Room 1(Copy of)

2.1.1 Luminaire data/Room elements

Product data:

Type No.\Make

3 42 **Kosnic**
Order No. : KBHDDC6S65-WHT w/ KLED12STD/4P-W27
Luminaire name : LED Surface Bulkhead - Blanca + DD
Equipment : 1 x LED 12 W / 930 lm

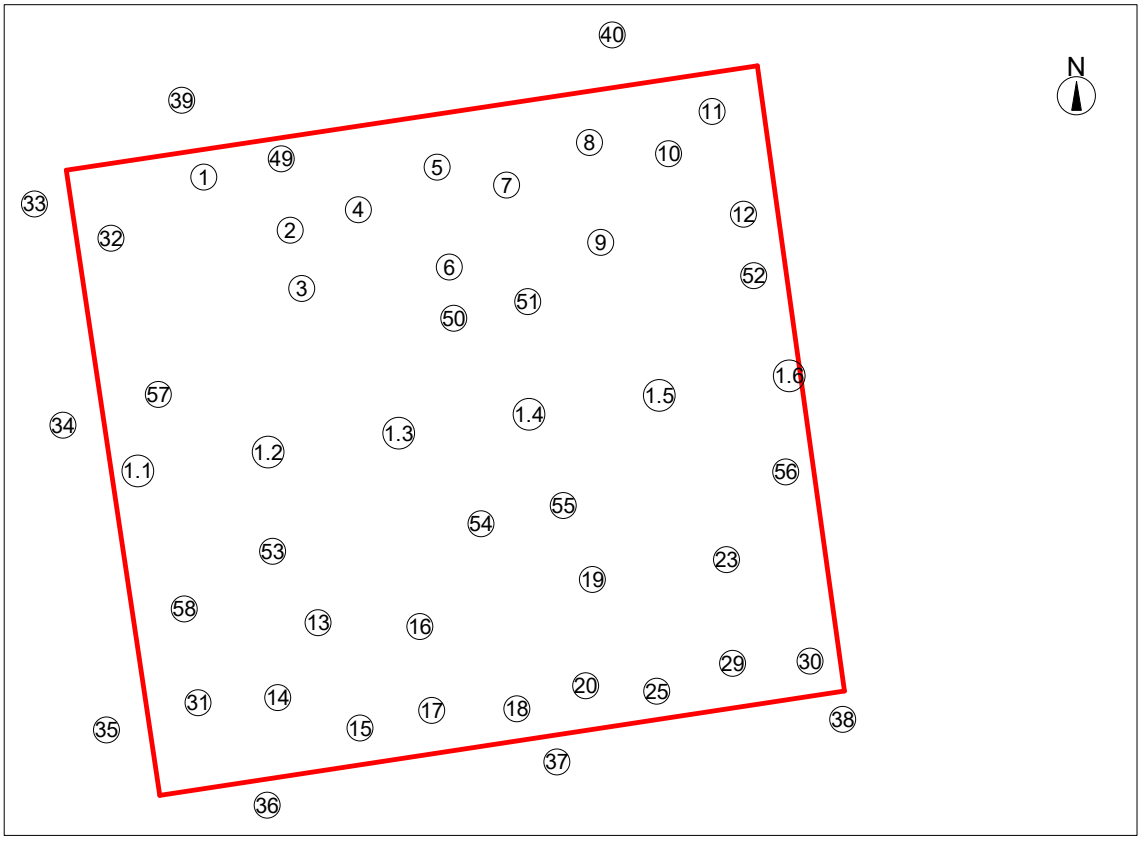
5 8 **iGuzzini**
Order No. : E877
Luminaire name : Laser Blade InOut - wall
Equipment : 1 x LED 5.7 W / 350 lm

2 Room 1(Copy of)

2.1 Description, Room 1(Copy of)

2.1.1 Luminaire data/Room elements

Floor with luminaire and sensor positions:



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2 Room 1(Copy of)

2.1 Description, Room 1(Copy of)

2.1.1 Luminaire data/Room elements

	Centre point			Rotation angle			Target coordinates		
No.	X [m]	Y [m]	Z [m]	Z [°]	C0 [°]	C90 [°]	Xa [m]	Ya [m]	Za [m]
Kosnic LED Surface Bulkhead - Blanca + DD KBHDDC6S65-WHT w/ KLED12STD/4P-W27									
1	1.22	17.18	2.50	0.00	0.00	0.00	1.22	17.18	-0.00
2	3.63	15.70	2.50	0.00	0.00	0.00	3.63	15.70	-0.00
3	3.95	14.08	2.50	0.00	0.00	0.00	3.95	14.08	-0.00
4	5.52	16.27	2.50	0.00	0.00	0.00	5.52	16.27	-0.00
5	7.71	17.45	2.50	0.00	0.00	0.00	7.71	17.45	-0.00
6	8.05	14.68	2.50	0.00	0.00	0.00	8.05	14.68	-0.00
7	9.64	16.95	2.50	0.00	0.00	0.00	9.64	16.95	-0.00
8	11.95	18.13	2.50	0.00	0.00	0.00	11.95	18.13	-0.00
9	12.26	15.36	2.50	0.00	0.00	0.00	12.26	15.36	-0.00
10	14.14	17.83	2.50	0.00	0.00	0.00	14.14	17.83	-0.00
11	15.35	19.00	2.50	0.00	0.00	0.00	15.35	19.00	-0.00
12	16.22	16.14	2.50	0.00	0.00	0.00	16.22	16.14	-0.00
13	4.40	4.79	2.50	0.00	0.00	0.00	4.40	4.79	-0.00
14	3.28	2.71	2.50	0.00	0.00	0.00	3.28	2.71	-0.00
15	5.56	1.87	2.50	0.00	0.00	0.00	5.57	1.87	-0.00
16	7.23	4.68	2.50	0.00	0.00	0.00	7.23	4.68	-0.00
17	7.56	2.36	2.50	0.00	0.00	0.00	7.56	2.36	-0.00
18	9.93	2.40	2.50	0.00	0.00	0.00	9.93	2.40	-0.00
19	12.03	5.99	2.50	0.00	0.00	0.00	12.03	5.99	-0.00
20	11.84	3.04	2.50	0.00	0.00	0.00	11.84	3.04	-0.00
23	15.75	6.54	2.50	0.00	0.00	0.00	15.75	6.54	-0.00
25	13.81	2.89	2.50	0.00	0.00	0.00	13.81	2.89	-0.00
29	15.93	3.66	2.50	0.00	0.00	0.00	15.93	3.66	-0.00
30	18.08	3.73	2.50	0.00	0.00	0.00	18.08	3.73	-0.00
31	1.06	2.57	2.50	0.00	0.00	0.00	1.06	2.57	-0.00
32	-1.36	15.47	2.50	0.00	0.00	0.00	-1.36	15.47	-0.00
49	3.37	17.68	2.50	0.00	0.00	0.00	3.37	17.68	-0.00
50	8.17	13.25	2.50	0.00	0.00	0.00	8.17	13.25	-0.00
51	10.23	13.71	2.50	0.00	0.00	0.00	10.23	13.71	-0.00
52	16.51	14.44	2.50	0.00	0.00	0.00	16.51	14.44	-0.00
53	3.14	6.78	2.50	0.00	0.00	0.00	3.14	6.78	-0.00
54	8.93	7.54	2.50	0.00	0.00	0.00	8.93	7.54	-0.00
55	11.22	8.05	2.50	0.00	0.00	0.00	11.22	8.05	-0.00
56	17.40	8.98	2.50	0.00	0.00	0.00	17.40	8.98	-0.00
57	-0.04	11.14	2.50	0.00	0.00	0.00	-0.04	11.14	-0.00
58	0.68	5.17	2.50	0.00	0.00	0.00	0.68	5.17	-0.00
1.1	-0.61	9.01	2.50	0.00	0.00	0.00	--	--	--
1.2	3.01	9.54	2.50	0.00	0.00	0.00	--	--	--
1.3	6.64	10.06	2.50	0.00	0.00	0.00	--	--	--
1.4	10.26	10.59	2.50	0.00	0.00	0.00	--	--	--
1.5	13.89	11.11	2.50	0.00	0.00	0.00	--	--	--
1.6	17.50	11.65	2.50	0.00	0.00	0.00	--	--	--

	Position			Rotation		
	x[m]	y[m]	z[m]	za	xa	ya
iGuzzini Laser Blade InOut - wall E877						
33	-3.48	16.42	3.50	0.0°	0.0°	0.0°
34	-2.69	10.28	3.50	0.0°	0.0°	0.0°
35	-1.48	1.81	3.50	0.0°	0.0°	0.0°
36	2.99	-0.28	3.50	0.0°	0.0°	0.0°
37	11.04	0.92	3.50	0.0°	0.0°	0.0°
38	18.98	2.10	3.50	0.0°	0.0°	0.0°
39	0.61	19.31	3.50	0.0°	0.0°	0.0°

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2 Room 1(Copy of)

2.1 Description, Room 1(Copy of)

2.1.1 Luminaire data/Room elements

40	12.57	21.13	3.50	0.0°	0.0°	0.0°

Structural elements

Measuring surface

No.	xm[m]	ym[m]	zm[m]	Length	Width	Rotation angle z axis	L axis	Q axis
M 1	-1.76	-2.43	0.25	33.23	31.32	8.37	0.00	0.00
M 2	1.35	12.90	0.75	4.31	5.22	9.39	0.00	0.00
M 3	-0.83	8.47	0.85	18.86	3.66	8.11	0.00	0.00
M 4	6.99	21.18	0.75	1.31	0.06	180.00	88.83	180.00

Others

No.	xm[m]	ym[m]	zm[m]	Length	Width	Rotation angle z axis	L axis	Q axis	rho[%]
A 1	-1.47	9.68	0.01	18.97	3.05	8.56	0.00	0.00	100
Tr 2	-0.05	17.84	0.00	1.52	7.60	279.37	0.00	0.00	100
Tr 3	4.22	18.47	0.00	1.51	7.60	279.37	0.00	0.00	100
Tr 4	8.61	19.05	0.00	1.51	7.60	279.37	0.00	0.00	100
Tr 5	12.65	19.72	0.00	1.49	7.45	279.37	0.00	0.00	100
Tr 6	1.56	8.09	0.00	1.42	7.58	279.37	0.00	0.00	100
Tr 7	2.62	28.20	0.00	1.51	7.60	279.37	0.00	0.00	100
Tr 8	7.01	28.72	0.00	1.51	7.60	279.37	0.00	0.00	100
Tr 10	14.03	10.02	0.00	1.49	7.45	279.37	0.00	0.00	100
Tr 11	-1.17	7.64	0.00	18.97	3.05	8.56	0.00	0.00	100
Tr 1	3.02	12.76	0.00	2.61	2.83	278.42	0.00	0.00	100
Tr 2	5.42	13.12	-0.00	2.67	2.71	8.62	0.00	0.00	100
Tr 3	13.59	14.36	-0.00	2.82	2.61	8.62	0.00	0.00	87
Tr 4	13.82	14.39	-0.00	2.65	2.56	8.62	0.00	0.00	100
Tr 5	3.50	8.41	-0.00	3.17	3.16	282.96	0.00	0.00	100
Tr 6	6.18	6.56	-0.00	3.07	3.03	8.56	0.00	0.00	100
Tr 7	11.90	9.67	-0.00	2.80	3.04	282.96	0.00	0.00	100
Tr 8	14.57	7.82	-0.00	3.09	3.01	8.55	0.00	0.00	100

Window

No.	Wall	x'[m]	y'[m]	Width	Height	tau[%]	Partit.	Pollut.
Wi 1.1	1	-6263.58	579.24	2.00	1.50	80	1.00	0.90
Wi 1.2	1	-6259.70	579.83	2.00	1.50	80	1.00	0.90
Wi 1.3	1	-6255.14	580.53	2.00	1.50	80	1.00	0.90
Wi 1.4	1	-6251.25	581.12	2.00	1.50	80	1.00	0.90
Wi 1.5	1	-6247.29	581.72	2.00	1.50	80	1.00	0.90
Wi 3.1	3	-6264.29	596.89	2.00	1.50	80	1.00	0.90
Wi 3.2	3	-6264.29	596.89	2.00	1.50	80	1.00	0.90
Wi 3.3	3	-6260.09	597.52	2.00	1.50	80	1.00	0.90
Wi 3.4	3	-6255.88	598.16	2.00	1.50	80	1.00	0.90
Wi 3.5	3	-6255.88	598.16	2.00	1.50	80	1.00	0.90
Wi 3.6	3	-6251.62	598.81	2.00	1.50	80	1.00	0.90
Wi 3.7	3	-6268.03	596.32	2.00	1.50	80	1.00	0.90

Door

No.	Wall	x'[m]	y'[m]	Width	Height	rho[%]
DF 4.1	4	-6267.05	587.10	1.00	2.00	40

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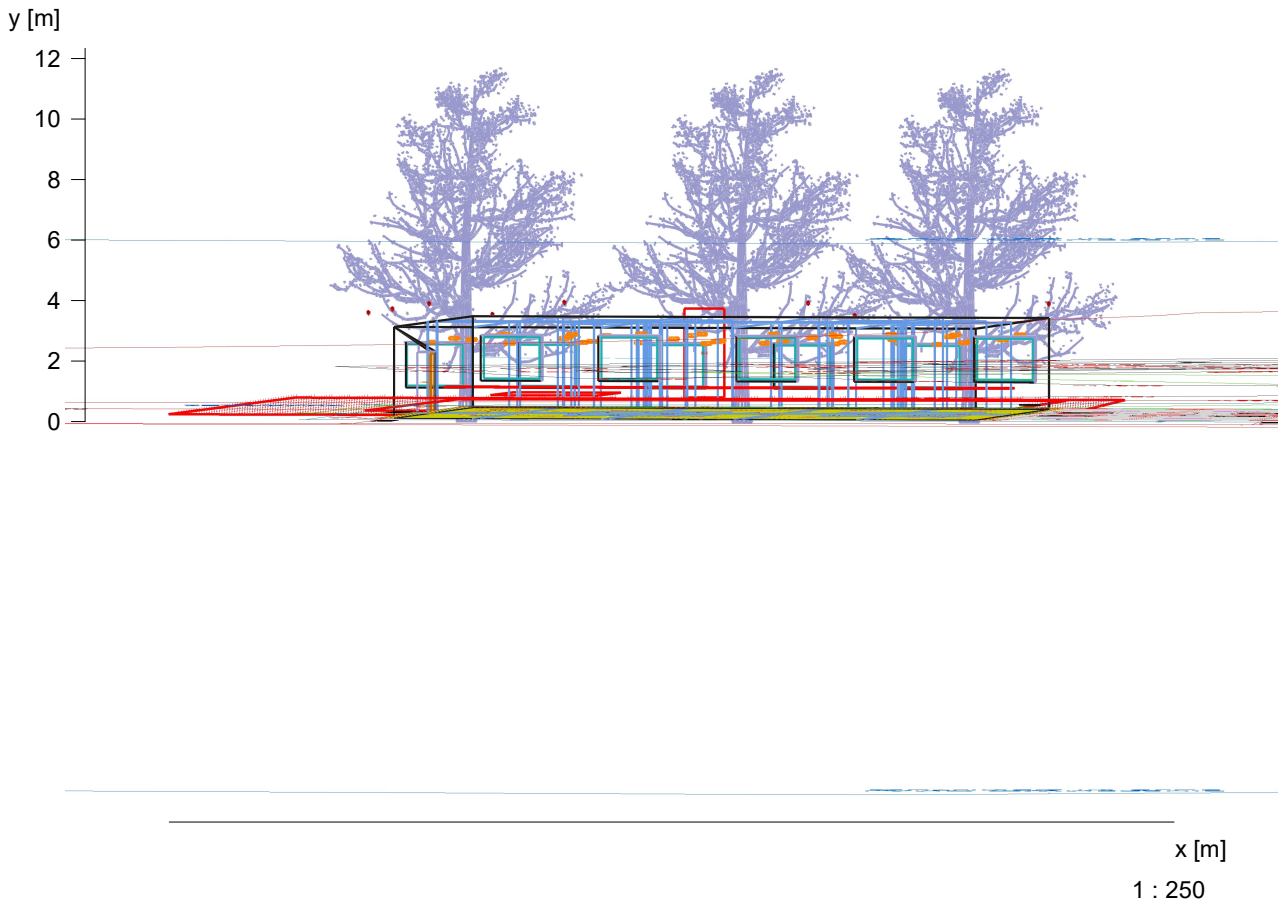
2.1 Description, Building 1

2.1.2 Floor plan



Wall	x	y	Length	Reflectance
1	-6246.79 m	581.80 m	19.25 m	100.0 %
2	-6249.21 m	599.17 m	17.54 m	100.0 %
3	-6268.42 m	596.26 m	19.43 m	100.0 %
4	-6265.82 m	578.90 m	17.56 m	50.0 %
Floor				66.8 %
Ceiling				100.0 %

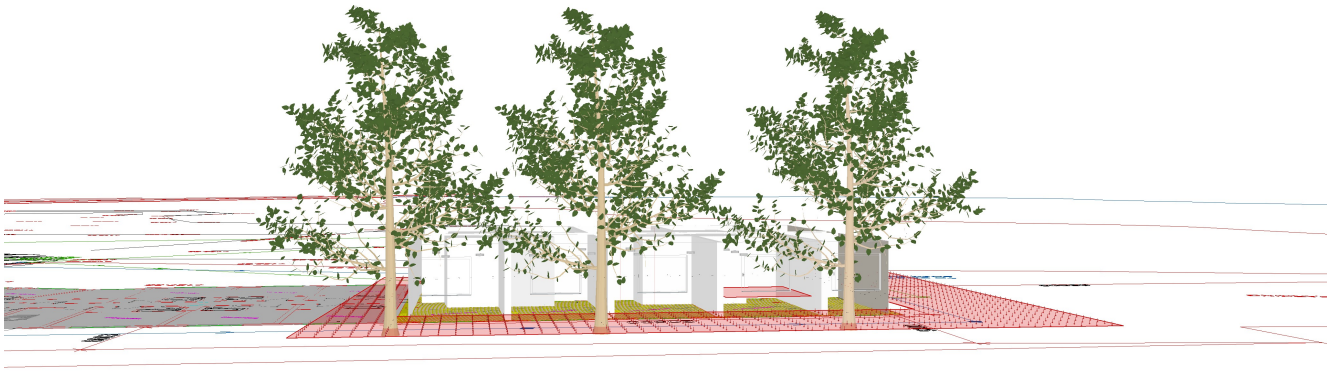
Room height	3.00 m
Height of ref. plane	----

2.1 Description, Building 1

2.1.3 3D view, View from the front

2.1 Description, Building 1

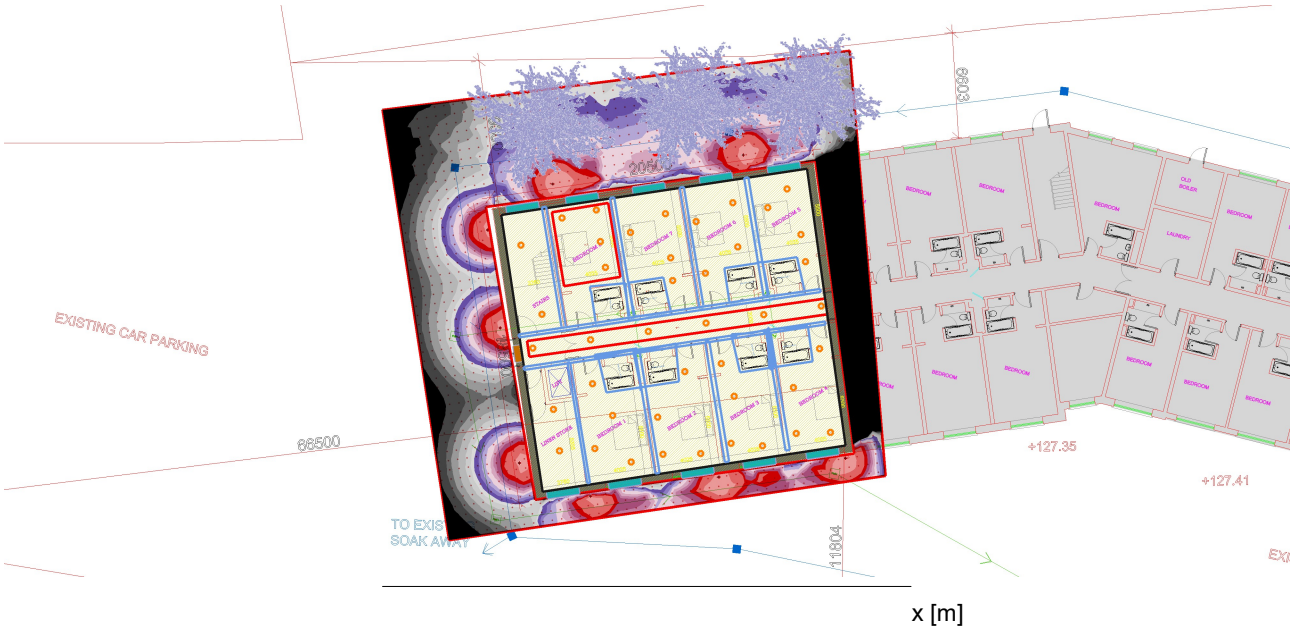
2.1.4 3D view, View from the back

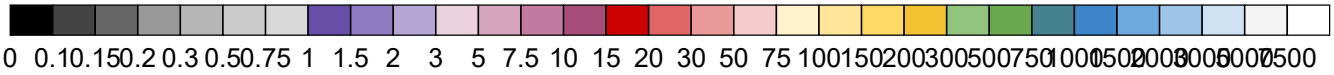


2 Building 1

2.2 Summary, Room 1

2.2.1 Result overview, Measuring area 1





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.25 m
Maintenance factor	0.80
Total luminous flux of all lamps	41860 lm
Total power	549.6 W
Total power per area (339.36 m²)	1.62 W/m²

Illuminance

Average illuminance	Em	4 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	40.4 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

Type No.\Make

Kosnic

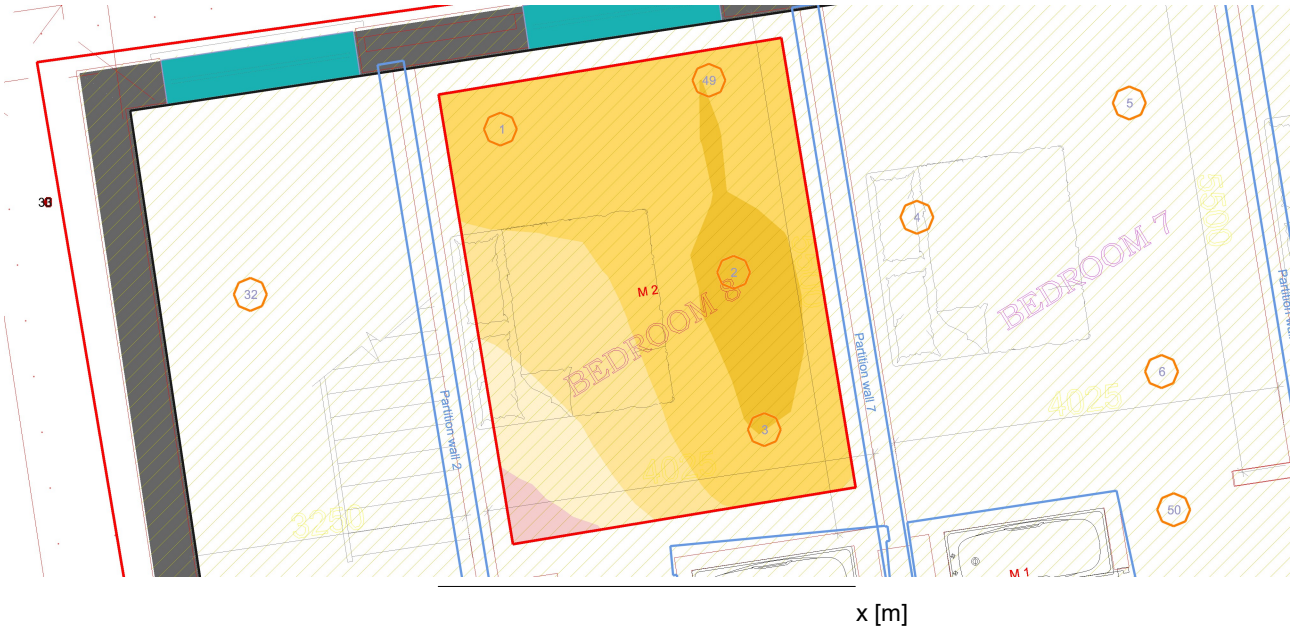
3 42 Order No. : KBHDDC6S65-WHT w/ KLED12STD/4P-W27
Luminaire name : LED Surface Bulkhead - Blanca + DD
Equipment : 1 x LED 12 W / 930 lm

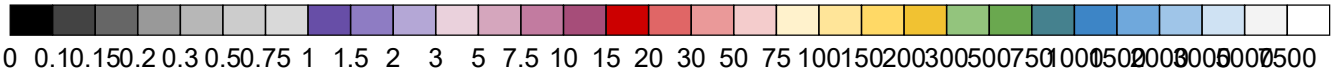
iGuzzini

5 8 Order No. : E877
Luminaire name : Laser Blade InOut - wall
Equipment : 1 x LED 5.7 W / 350 lm

2.2 Summary, Room 1(Copy of)

2.2.2 Result overview, Measuring area 2





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.75 m
Maintenance factor	0.80
Total luminous flux of all lamps	41860 lm
Total power	549.6 W
Total power per area (339.36 m²)	1.62 W/m²

Illuminance

Average illuminance	Em	157 lx
Minimum illuminance	Emin	66 lx
Maximum illuminance	Emax	208 lx
Uniformity Uo	Emin/Em	1:2.35 (0.42)
Diversity Ud	Emin/Emax	1:3.13 (0.32)

Type No.\Make

Kosnic

3 42

Order No.	: KBHDDC6S65-WHT w/ KLED12STD/4P-W27
Luminaire name	: LED Surface Bulkhead - Blanca + DD
Equipment	: 1 x LED 12 W / 930 lm

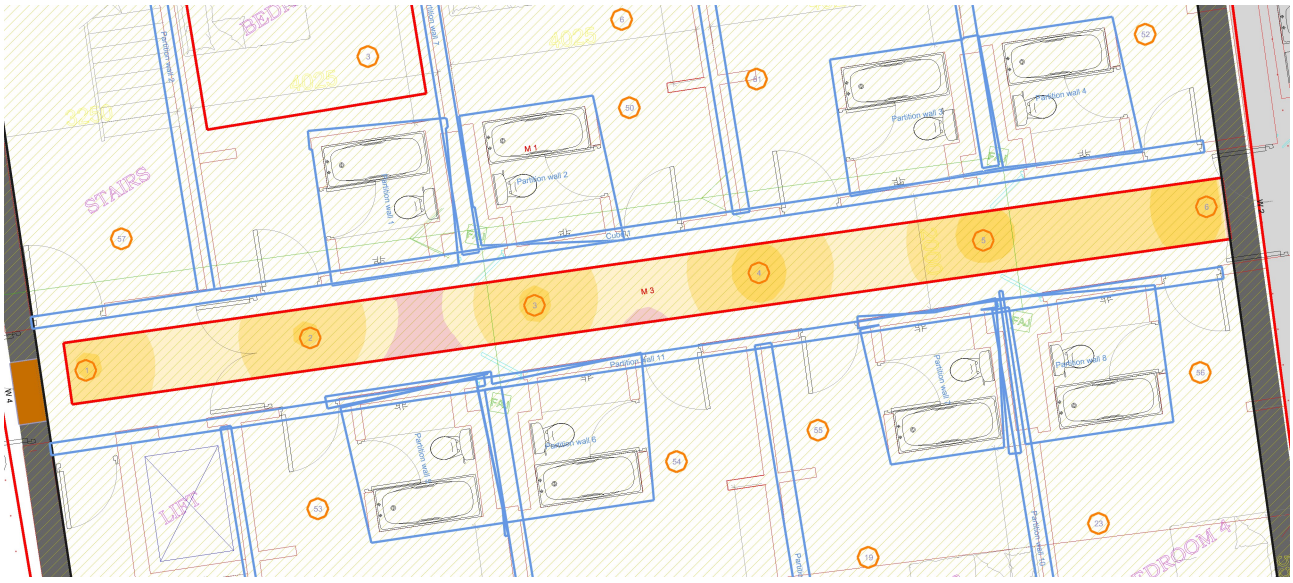
iGuzzini

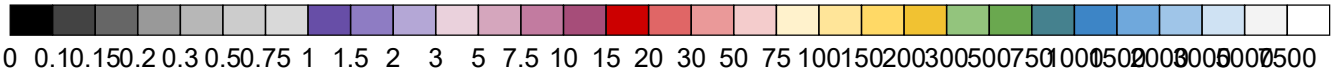
5 8

Order No.	: E877
Luminaire name	: Laser Blade InOut - wall
Equipment	: 1 x LED 5.7 W / 350 lm

2.2 Summary, Room 1(Copy of)

2.2.3 Result overview, Measuring area 3





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	41860 lm
Total power	549.6 W
Total power per area (339.36 m²)	1.62 W/m²

Illuminance

Average illuminance	Em	112 lx
Minimum illuminance	Emin	60 lx
Maximum illuminance	Emax	189 lx
Uniformity Uo	Emin/Em	1:1.89 (0.53)
Diversity Ud	Emin/Emax	1:3.16 (0.32)

Type No.\Make

Kosnic

3 42

Order No.	: KBHDDC6S65-WHT w/ KLED12STD/4P-W27
Luminaire name	: LED Surface Bulkhead - Blanca + DD
Equipment	: 1 x LED 12 W / 930 lm

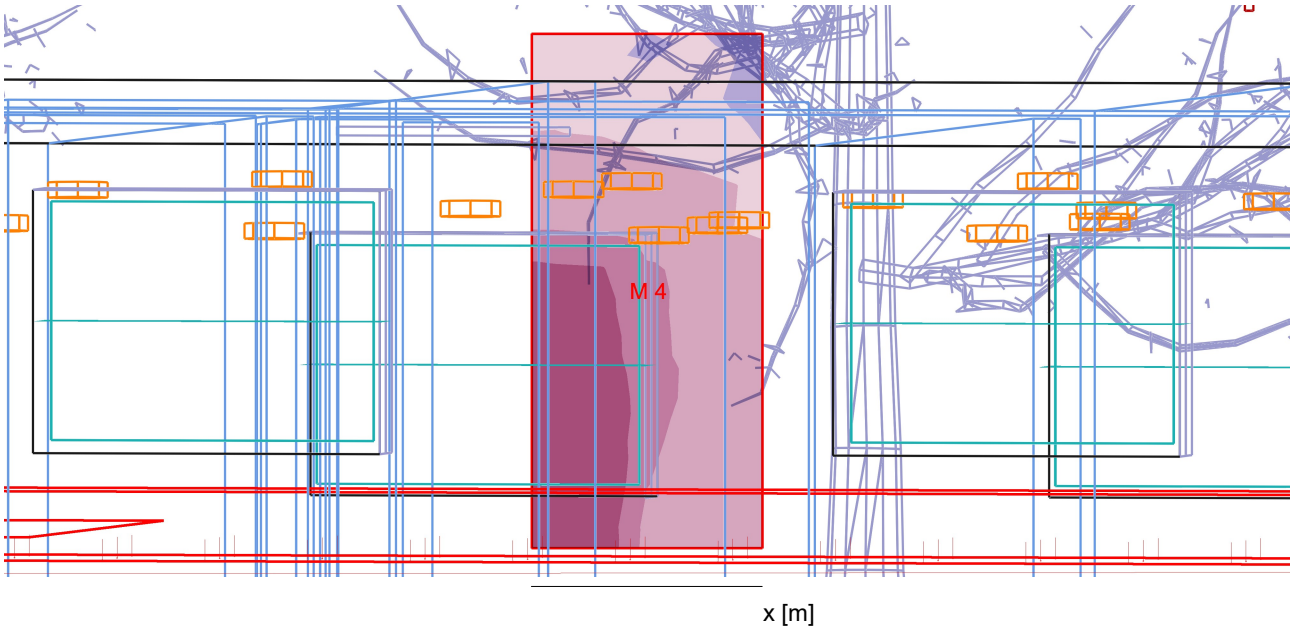
iGuzzini

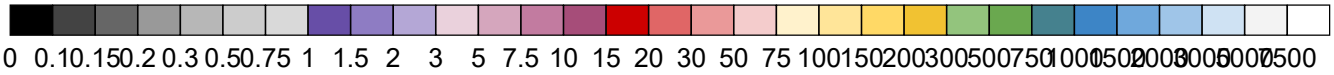
5 8

Order No.	: E877
Luminaire name	: Laser Blade InOut - wall
Equipment	: 1 x LED 5.7 W / 350 lm

2.2 Summary, Room 1

2.2.4 Result overview, Measuring area 4





General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	41860 lm
Total power	549.6 W
Total power per area (339.36 m²)	1.62 W/m²

Illuminance

Average illuminance	Em	6.8 lx
Minimum illuminance	Emin	2.6 lx
Maximum illuminance	Emax	12.2 lx
Uniformity Uo	Emin/Em	1:2.64 (0.38)
Diversity Ud	Emin/Emax	1:4.76 (0.21)

Type No.\Make

3 42 **Kosnic**
Order No. : KBHDDC6S65-WHT w/ KLED12STD/4P-W27
Luminaire name : LED Surface Bulkhead - Blanca + DD
Equipment : 1 x LED 12 W / 930 lm

5 8 **iGuzzini**
Order No. : E877
Luminaire name : Laser Blade InOut - wall
Equipment : 1 x LED 5.7 W / 350 lm

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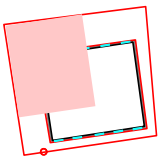
2 Hotel View

2.3 Calculation results, Front and Side

2.3.1 Table, Measuring area 1 (E)

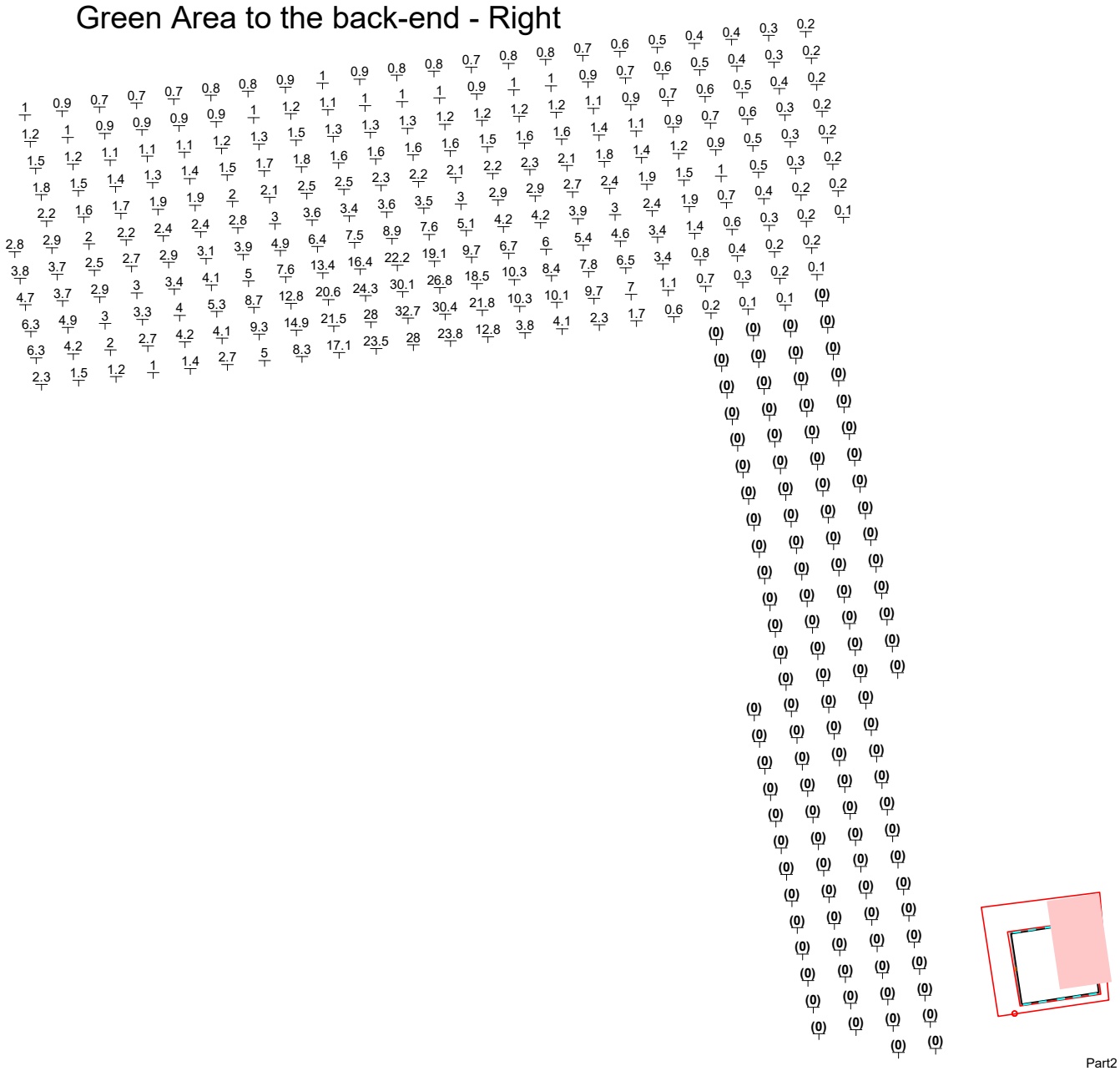
Height reference plane		: 0.25 m
Average illuminance	Em	: 4 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 40.4 lx
Uniformity Uo	Emin/Em	: ---
Diversity Ud	Emin/Emax	: ---



2 Room 1

2.3 Calculation results,

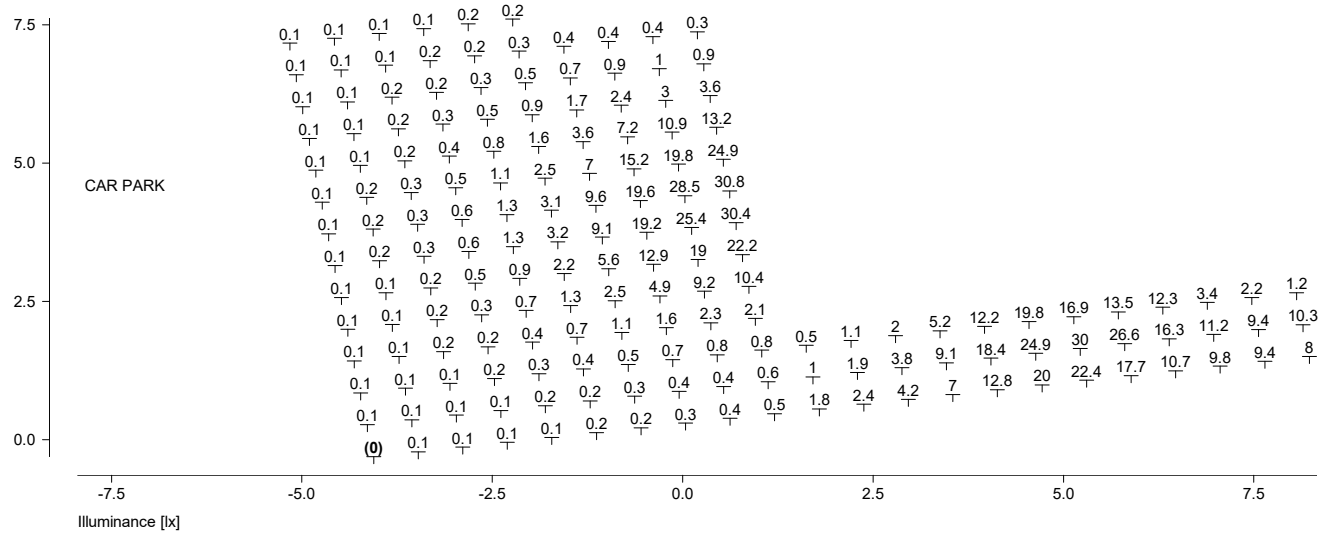
2.3.1 Table, Measuring area 1 (E)

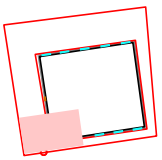


2 Room 1 View from Side of Proposed Bill

2.3 Calculation results,

2.3.1 Table, Measuring area 1 (E)



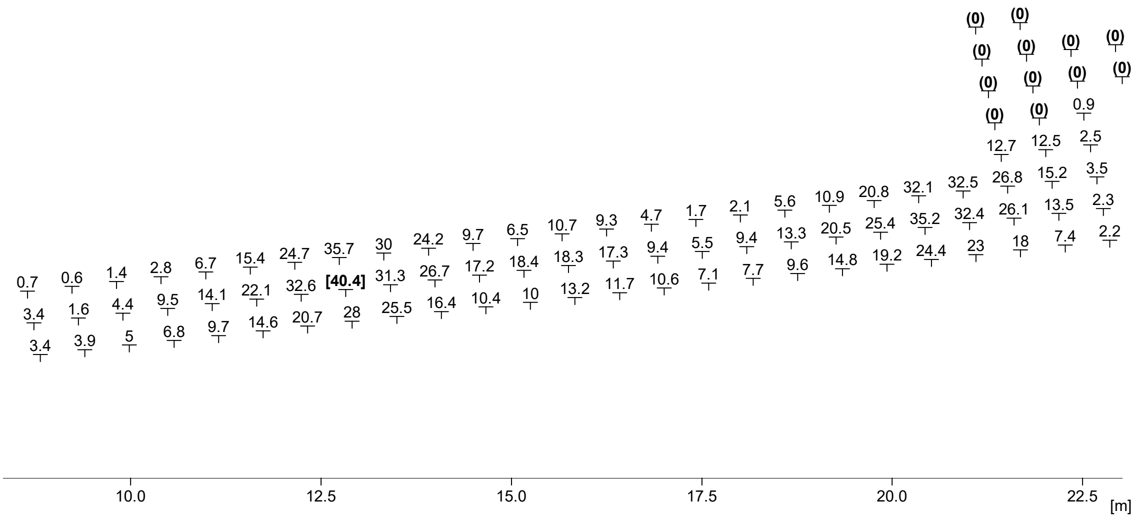


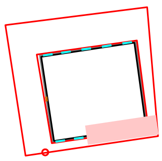
Part3

2 Corridor

2.3 Calculation results,

2.3.1 Table, Measuring area 1 (E)





Part4

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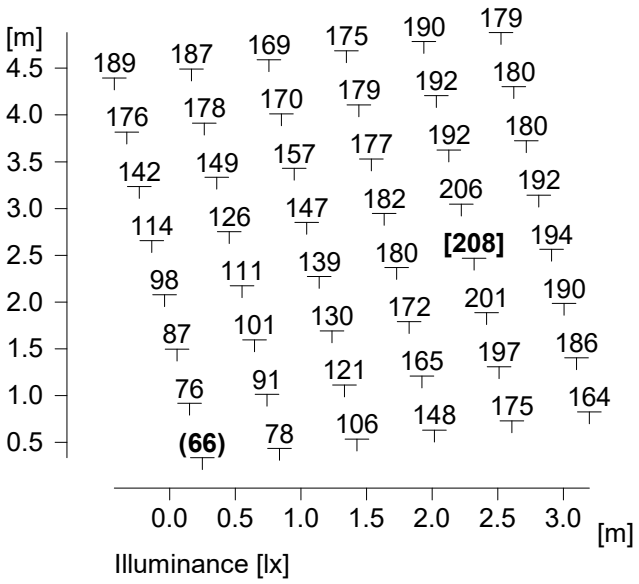
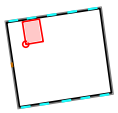
2.3 Calculation results, Bedroom

2.3.2 Table, Measuring area 2 (E)

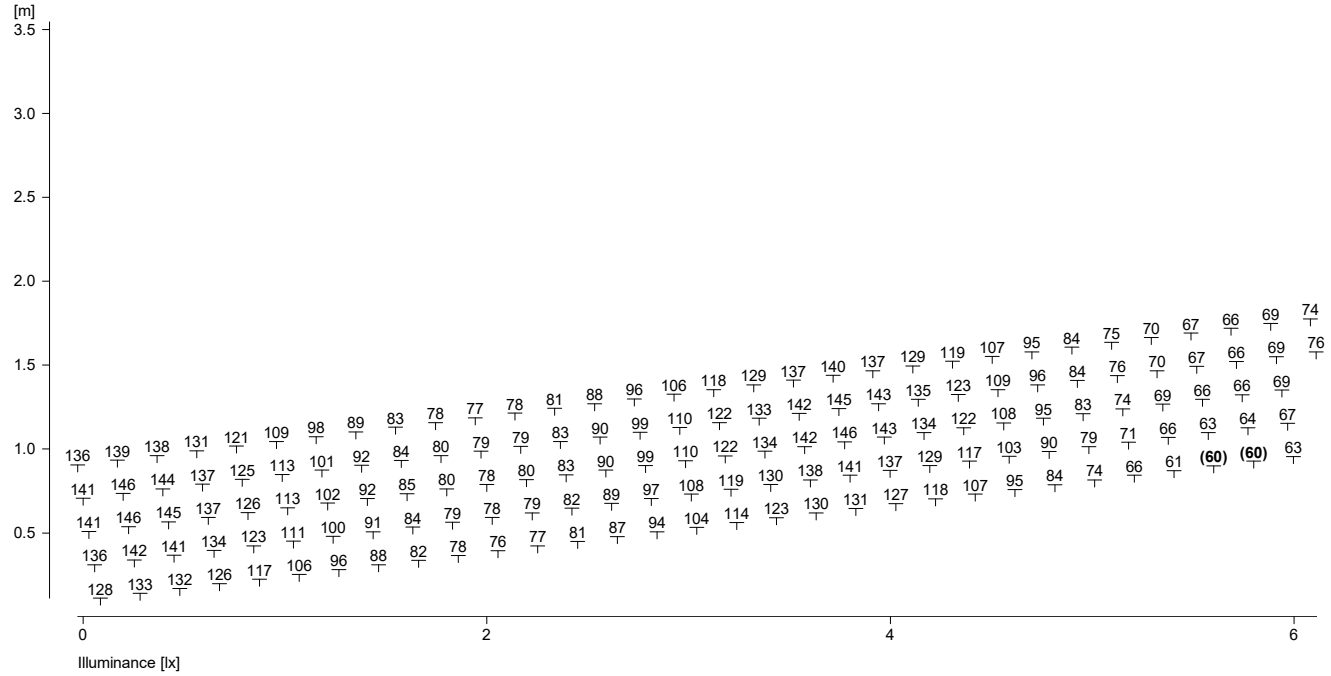


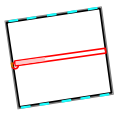


Height reference plane		: 0.75 m
Average illuminance	Em	: 157 lx
Minimum illuminance	Emin	: 66 lx
Maximum illuminance	Emax	: 208 lx
Uniformity Uo	Emin/Em	: 1 : 2.35 (0.42)
Diversity Ud	Emin/Emax	: 1 : 3.13 (0.32)

2.3 Calculation Results, Corridor

2.3.3 Table, Measuring area 3 (E)



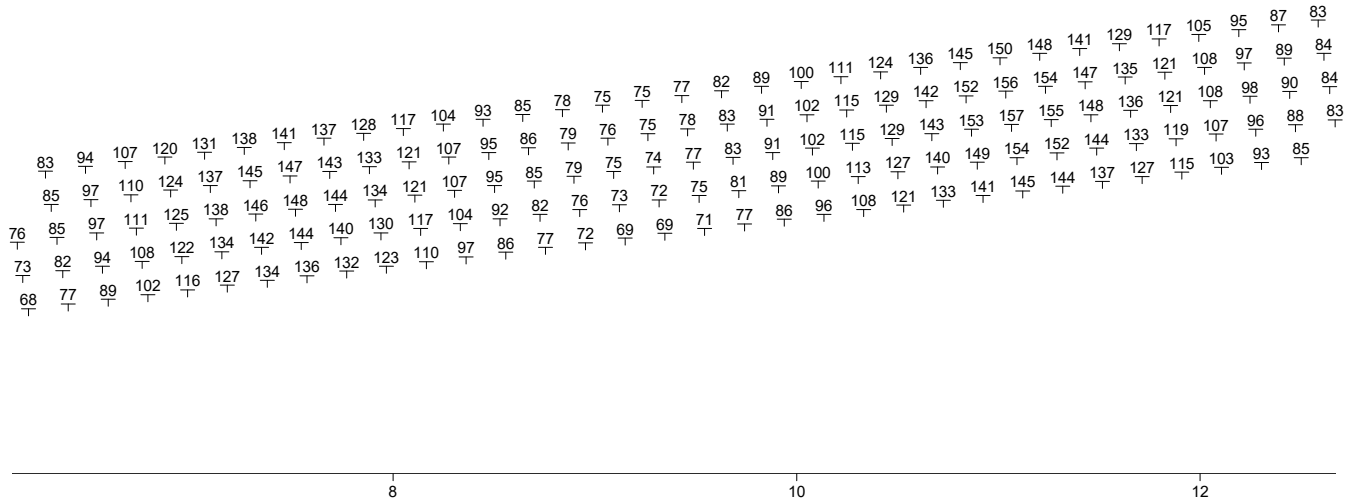


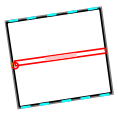
Part1

Height reference plane		: 0.85 m
Average illuminance	Em	: 112 lx
Minimum illuminance	Emin	: 60 lx
Maximum illuminance	Emax	: 189 lx
Uniformity Uo	Emin/Em	: 1 : 1.89 (0.53)
Diversity Ud	Emin/Emax	: 1 : 3.16 (0.32)

2.3 Calculation results, Corridor

2.3.3 Table, Measuring area 3 (E)



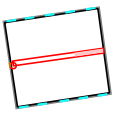


Part2

2.3 Calculation results, Corridor

2.3.3 Table, Measuring area 3 (E)

81	81	84	90	99	109	121	134	144	152	153	149	141	131	120	112	105	101	100	101	106	113	123	135	148	162	175	185	182	151	
82	82	86	92	100	112	125	138	149	156	158	154	145	134	123	114	107	103	101	103	107	114	125	137	152	166	183	[189]	186	157	
82	83	86	92	101	112	125	138	148	155	157	153	145	134	123	114	107	103	102	103	107	114	124	137	152	166	179	185	180	151	
81	82	85	91	99	110	121	133	143	149	150	147	140	130	121	112	106	102	101	102	107	114	123	135	149	163	172	176	167	134	
81	79	80	84	90	97	106	115	125	132	137	138	135	131	124	116	109	104	101	100	101	105	111	120	130	144	154	162	161	152	122



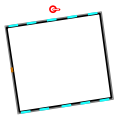
Part3

2.3 Calculation results, Area at Tree

2.3.4 Table, Measuring area 4 (E)

[m]					
2.75	3.2	3	2.8	3.1	2.8
	4	3.6	3.3	3.4	**(2.6)**
2.50	5	4.9	4.4	3.9	3.4
2.25	6.4	6.2	5.5	5.2	4.7
2.00	6.9	6.7	6.1	5.8	4.6
1.75	9.9	9.7	7.4	6.7	6
1.50	10.3	10.5	7.6	6.6	6.2
1.25	10.8	11.1	7.6	6.7	6.3
1.00	11.2	11.9	8.1	6.6	6.5
0.75	11.5	12	7.6	6.3	6.5
0.50	11.6	**[12.2]**	7.2	6	6.6
0.25	11.1	11.4	6.4	5.4	5.5
	0.2	0.4	0.6	0.8	1.0 [m]

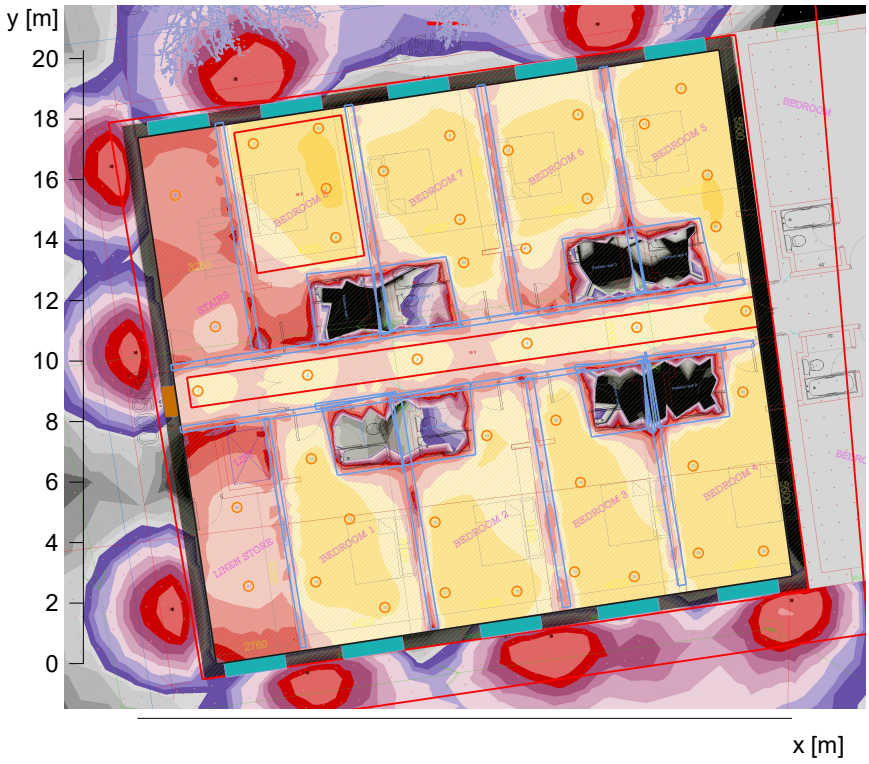
Illuminance [lx]



Average illuminance	Em	: 6.8 lx
Minimum illuminance	Emin	: 2.6 lx
Maximum illuminance	Emax	: 12.2 lx
Uniformity Uo	Emin/Em	: 1 : 2.64 (0.38)
Diversity Ud	Emin/Emax	: 1 : 4.76 (0.21)

2.3 Calculation results,

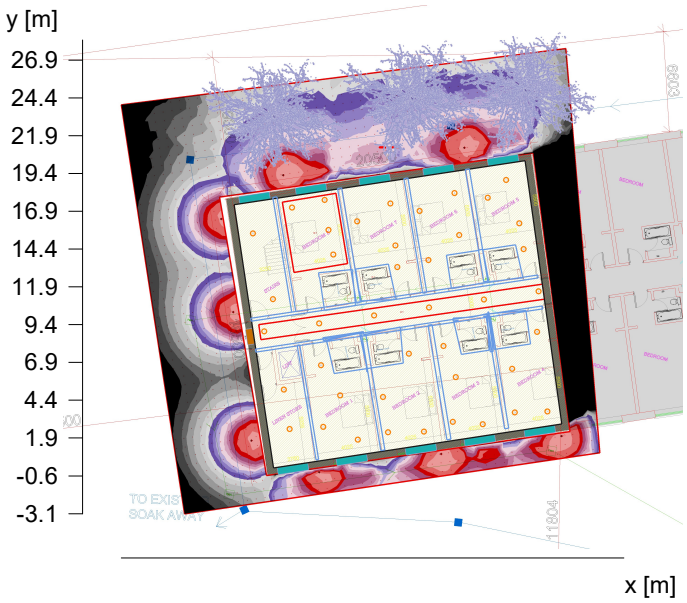
2.3.5 Pseudo colours, Floor (E)



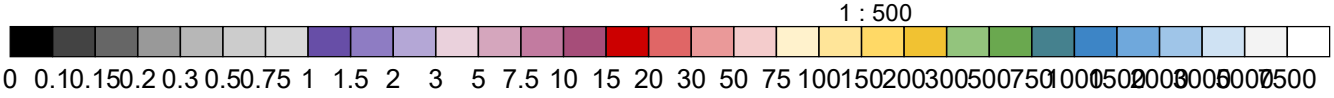
Average illuminance		Em	: 79 lx
Minimum illuminance		Emin	: 0 lx
Maximum illuminance		Emax	: 149 lx
Uniformity Uo		Emin/Em	: ---
Diversity Ud		Emin/Emax	: ---

2.3 Calculation results, Overview of all areas

2.3.6 Pseudo colours, Measuring area 1 (E)



1 : 500

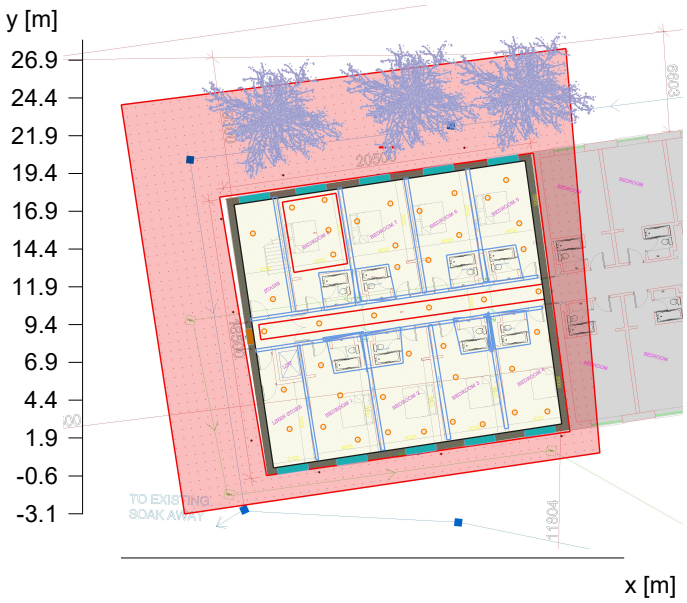


Illuminance [lx]

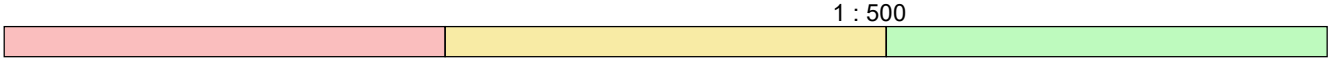
Height reference plane		: 0.25 m
Average illuminance	Em	: 4 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 40.4 lx
Uniformity Uo	Emin/Em	: ---
Diversity Ud	Emin/Emax	: ---

2.3 Calculation results,

2.3.7 Boundary line, Measuring area 1 (E)



1 : 500

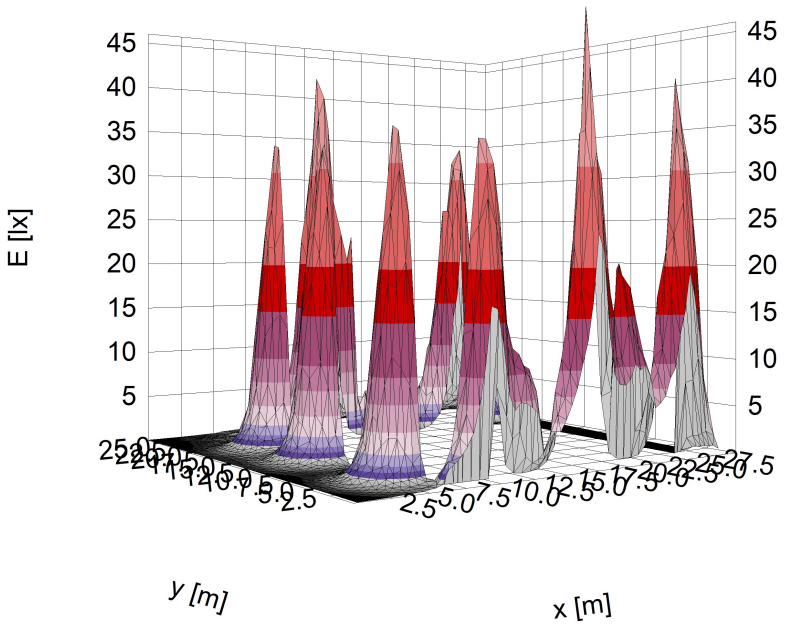


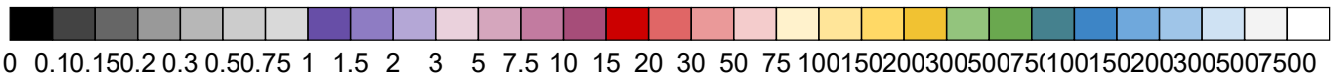
Illuminance [lx]

Height reference plane		: 0.25 m
Average illuminance	Em	: 4 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 40.4 lx
Uniformity Uo	Emin/Em	: ---
Diversity Ud	Emin/Emax	: ---

2.3 Calculation results,

2.3.8 3D mountain plot, Measuring area 1 (E)





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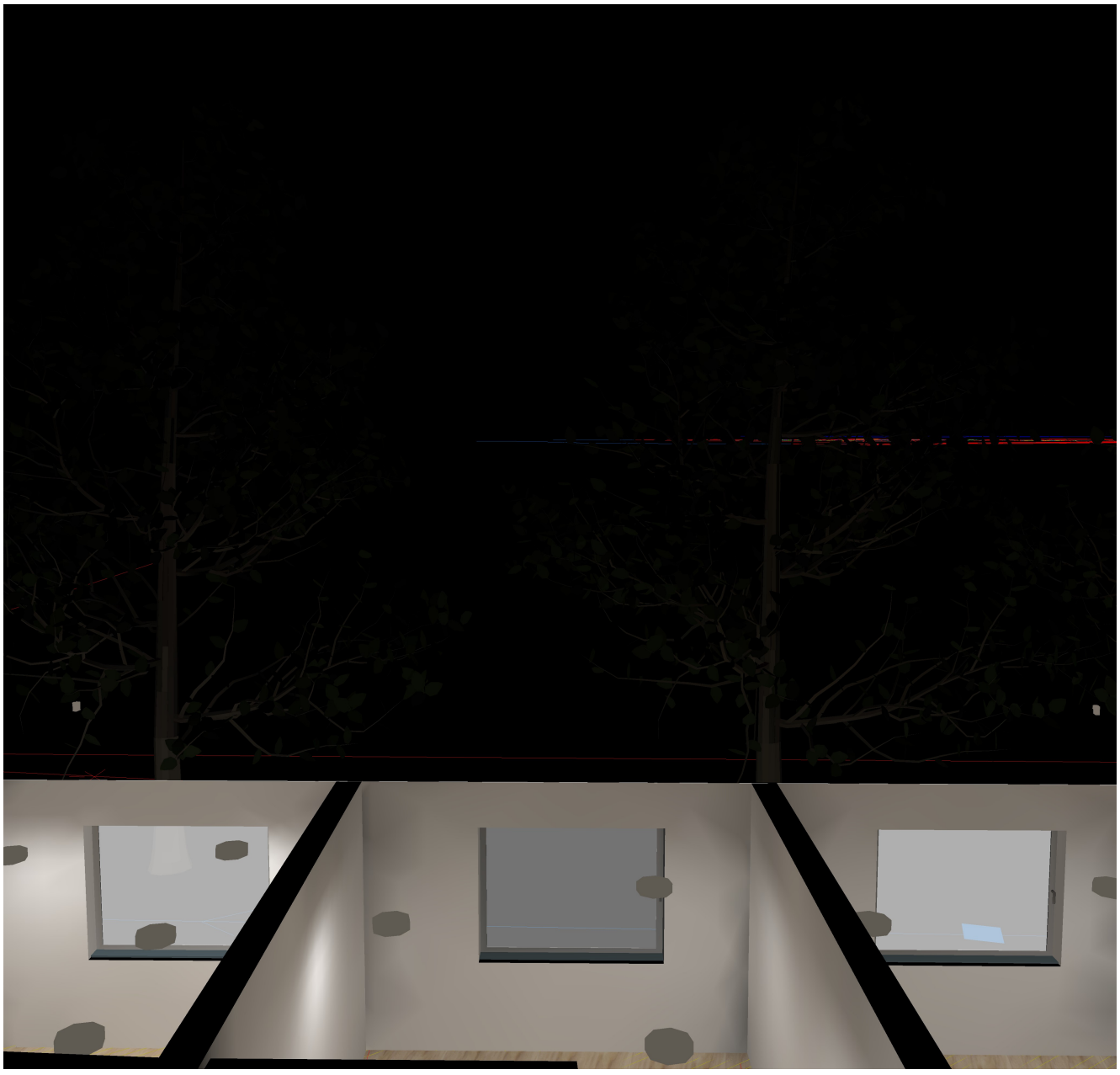
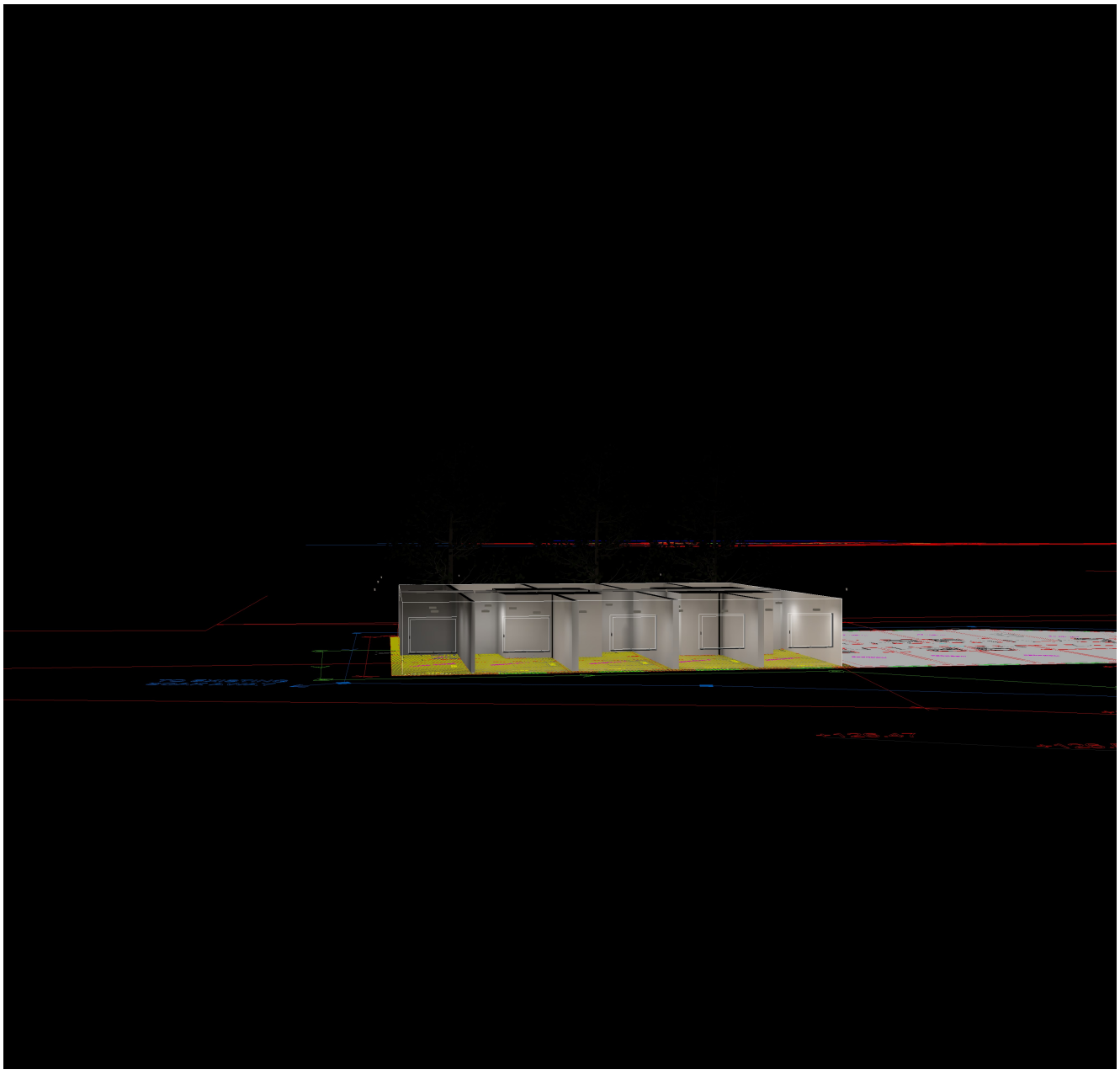
2.3 Calculation results, 2.3.9 3D

luminance, View 1



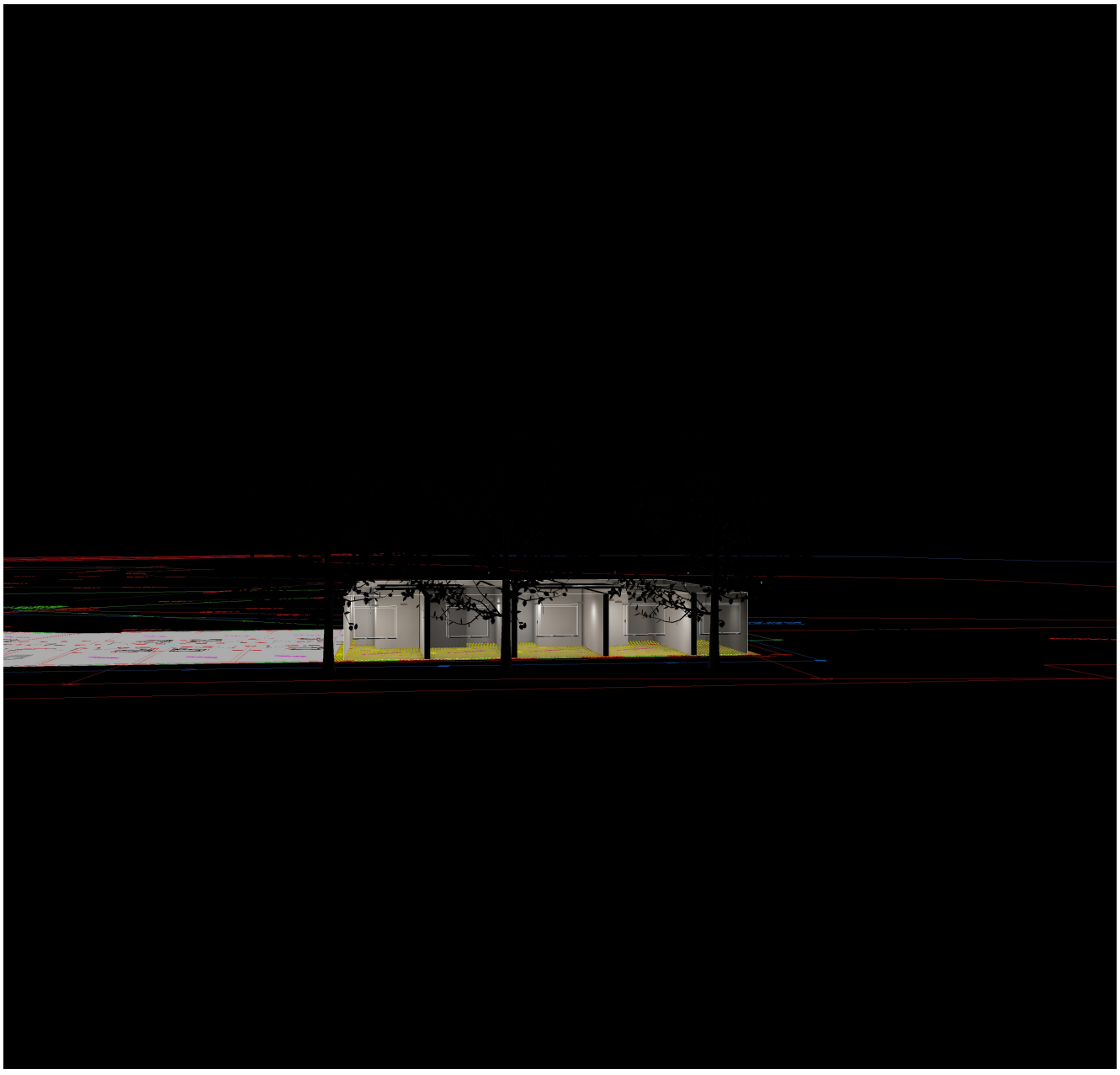
2.3 Calculation results,

2.3.10 3D luminance, View from the front



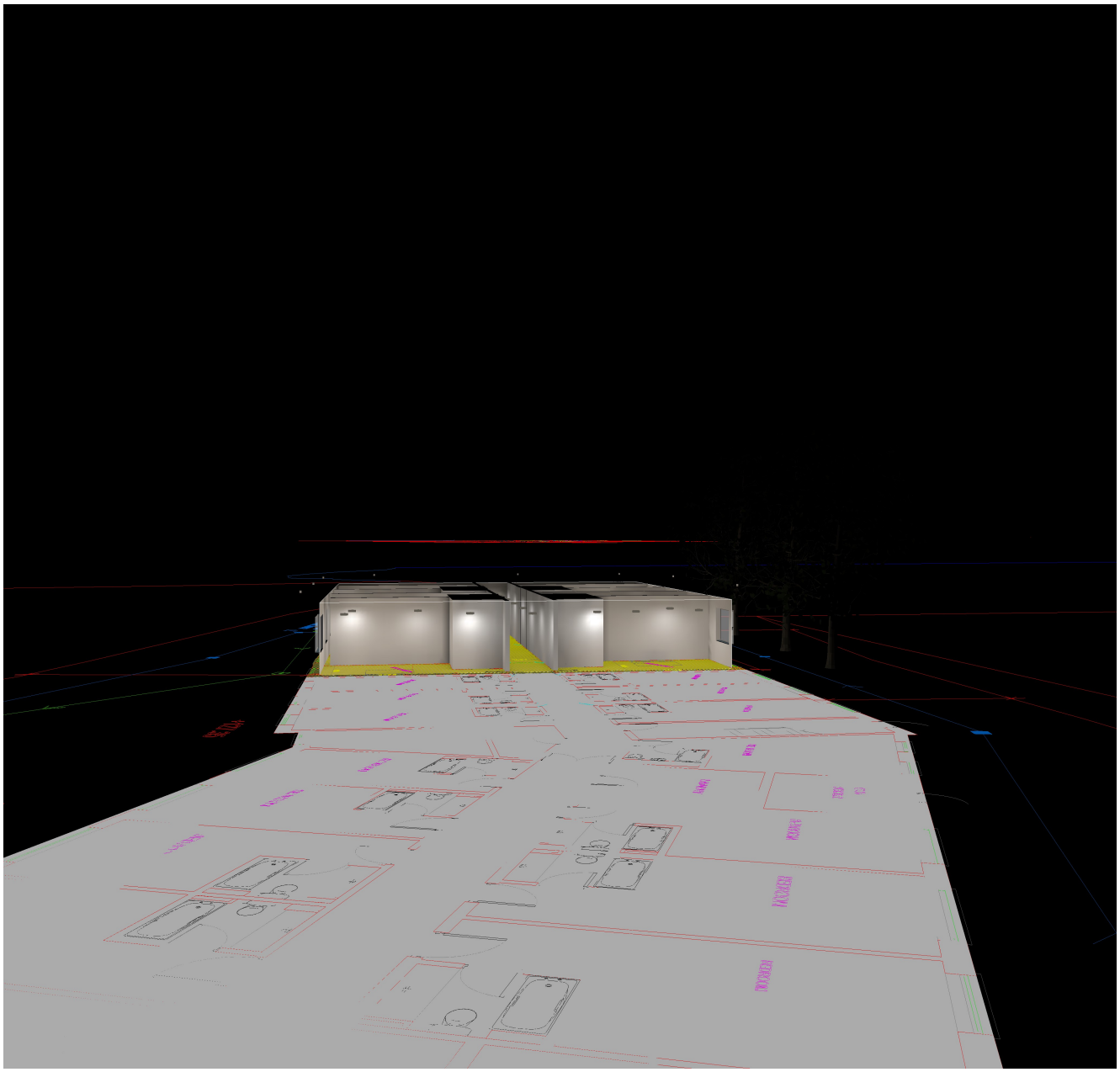
2.3 Calculation results,

2.3.11 3D luminance, View from the back



2.3 Calculation results, Room 1(Copy of)

2.3.12 3D luminance, View from the right



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2.3 Calculation results,

2.3.13 3D pseudo colours, View 1 (L)