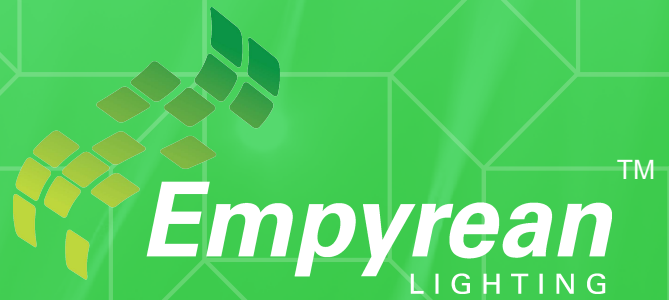


DIALUX REPORT



WAREHOUSE

Andromeda C Flood 110W

- 4.2m mounting height
- One for one replacement of Metal Halide 450W Metal Halide.

Operator:
Brock Shakespeare

Empyrean Lighting
Capital One Building
Level 2, 11/9 Capital Place
Birtinya Q 4575

1300 200 321
+61 7 5437 7270
info@empyreanlighting.com

Date:
12/02/2018



Project Ray Grace Pavillion_v2.1

Target 160 lux at ground level, asphalt low reflectance.
Top section - Ceiling Height 4.2m; Lower Section - Height slopes to 5.7m

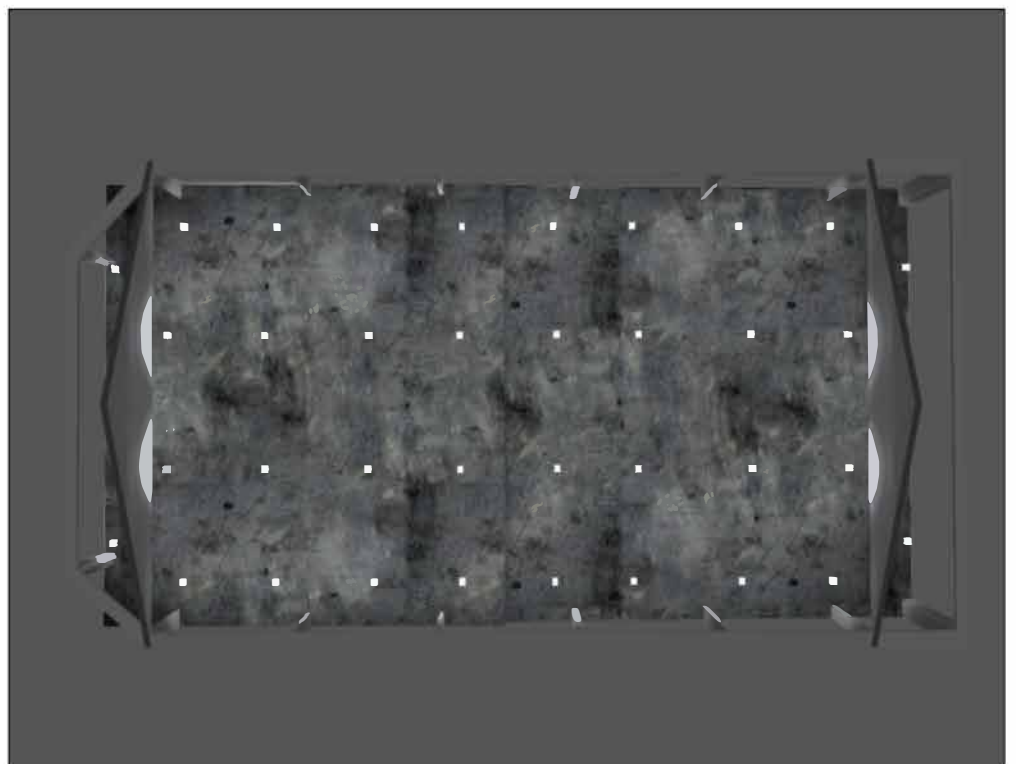
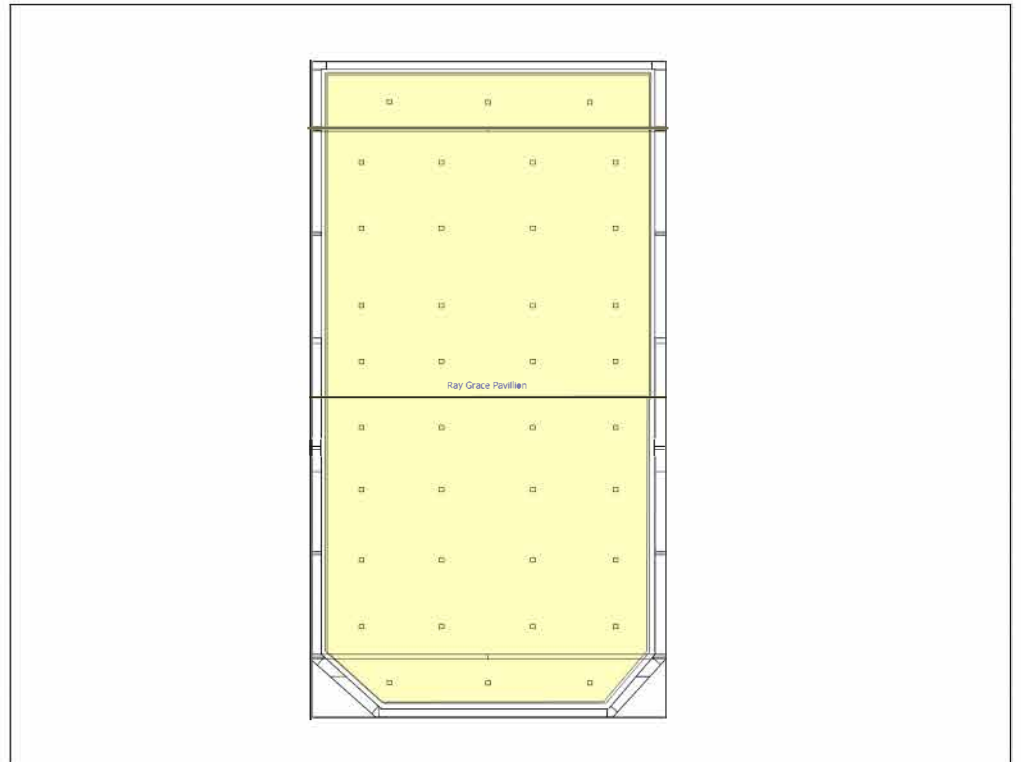


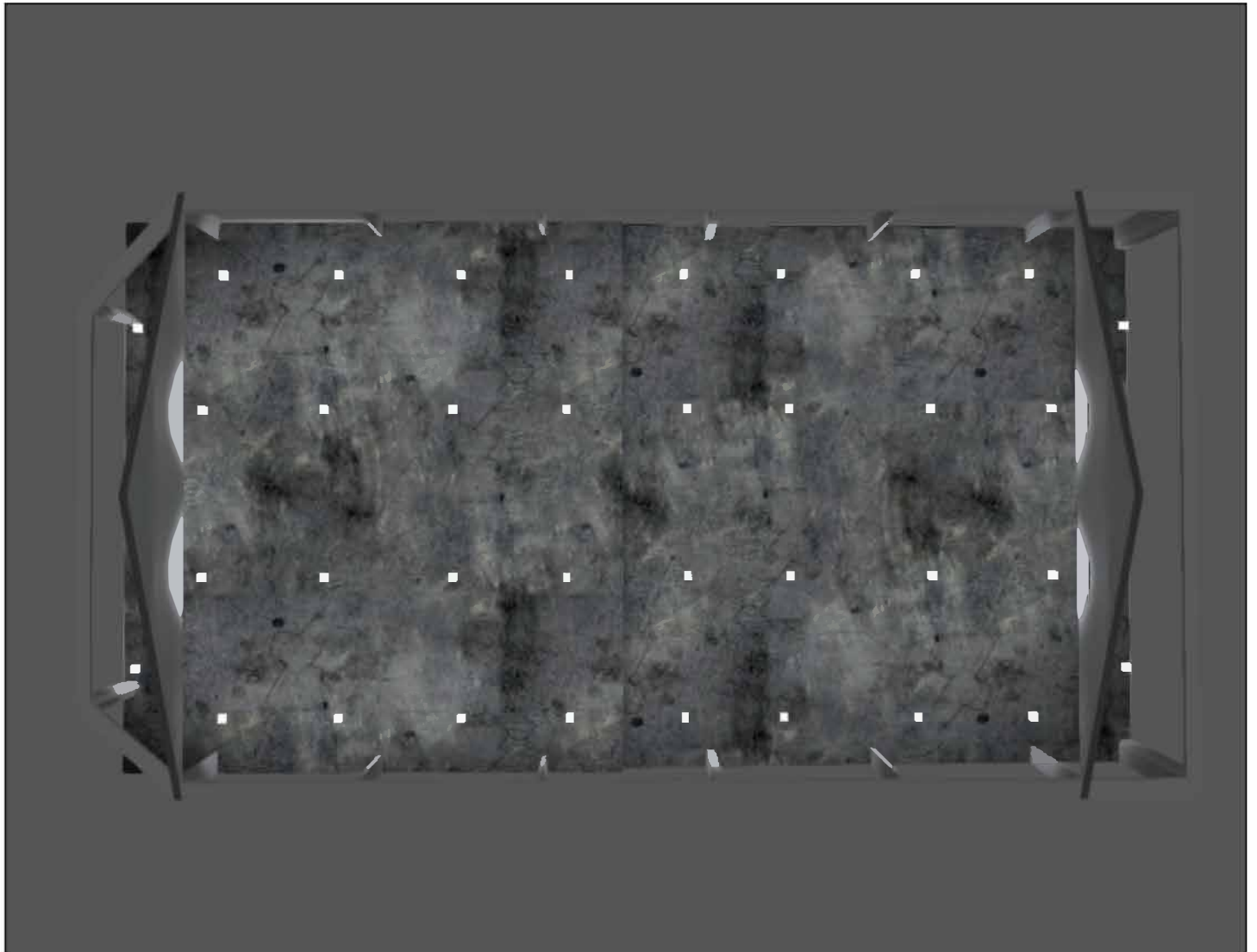
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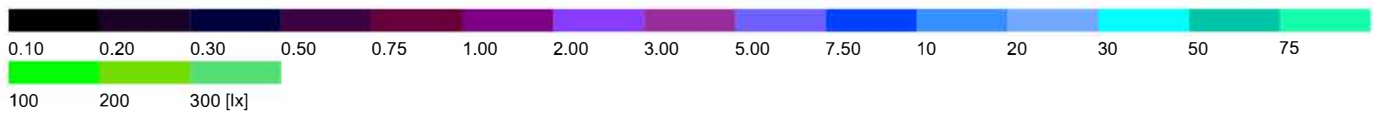
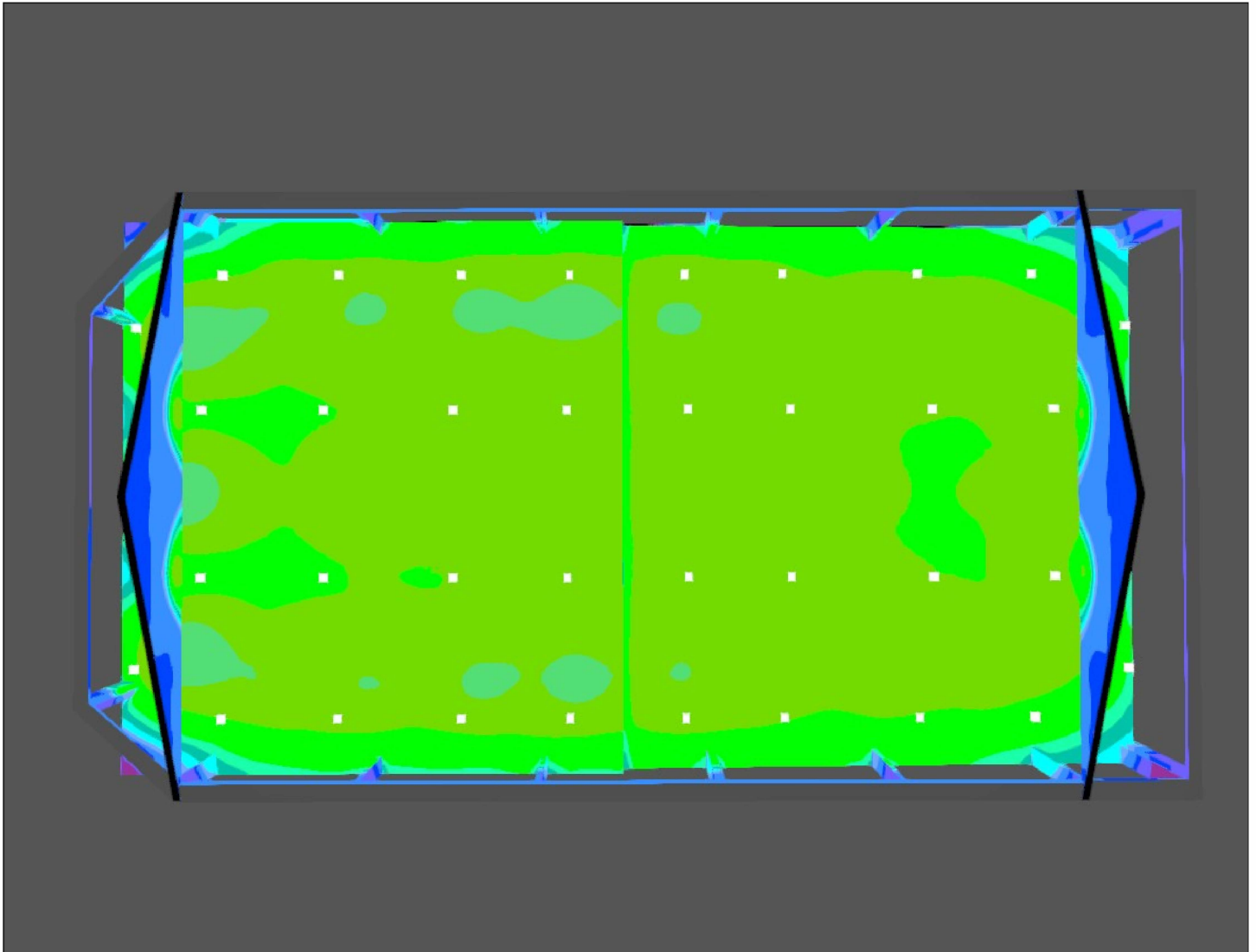
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Project Ray Grace Pavillion_v2.1

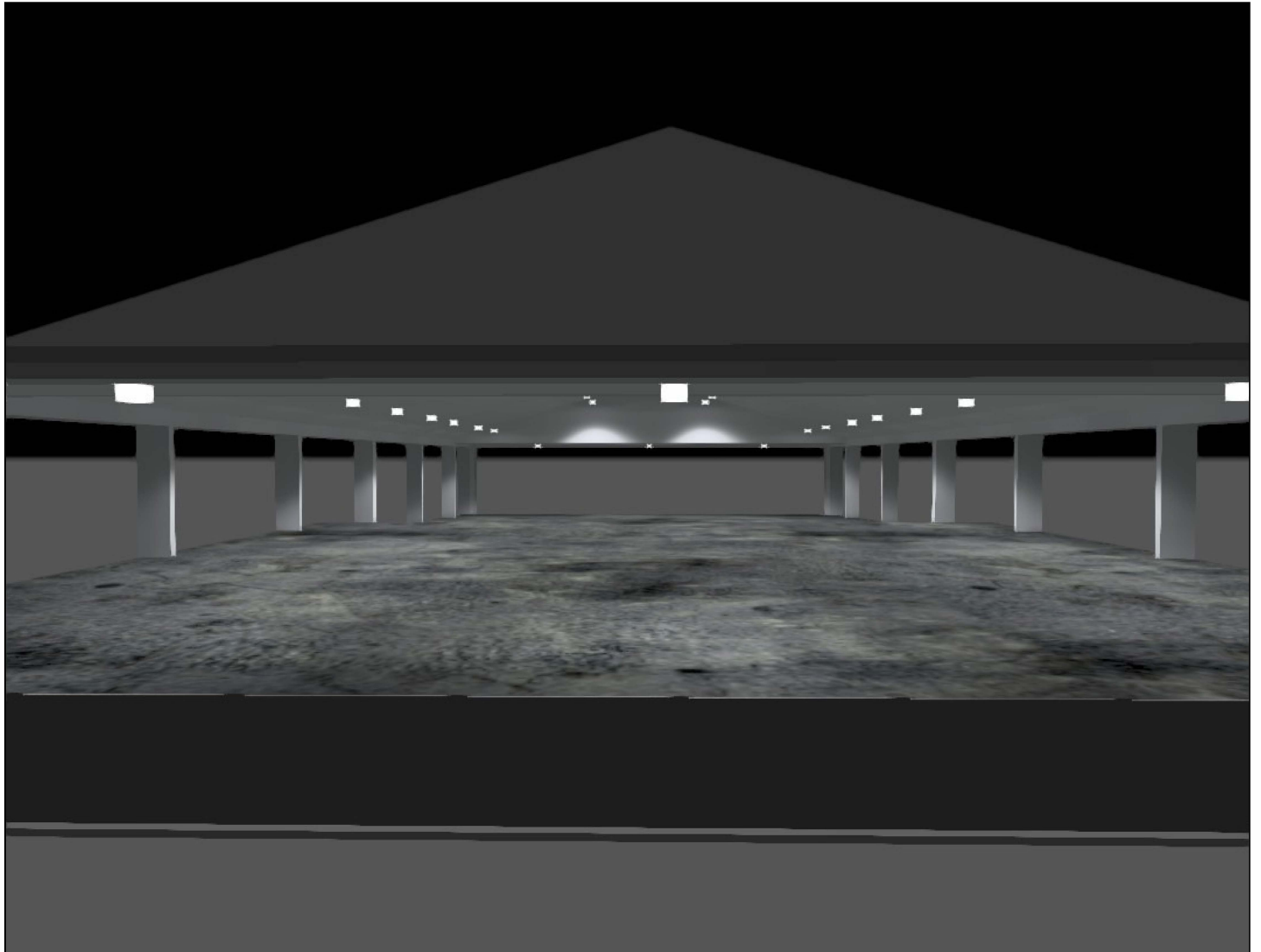
Above v2.1



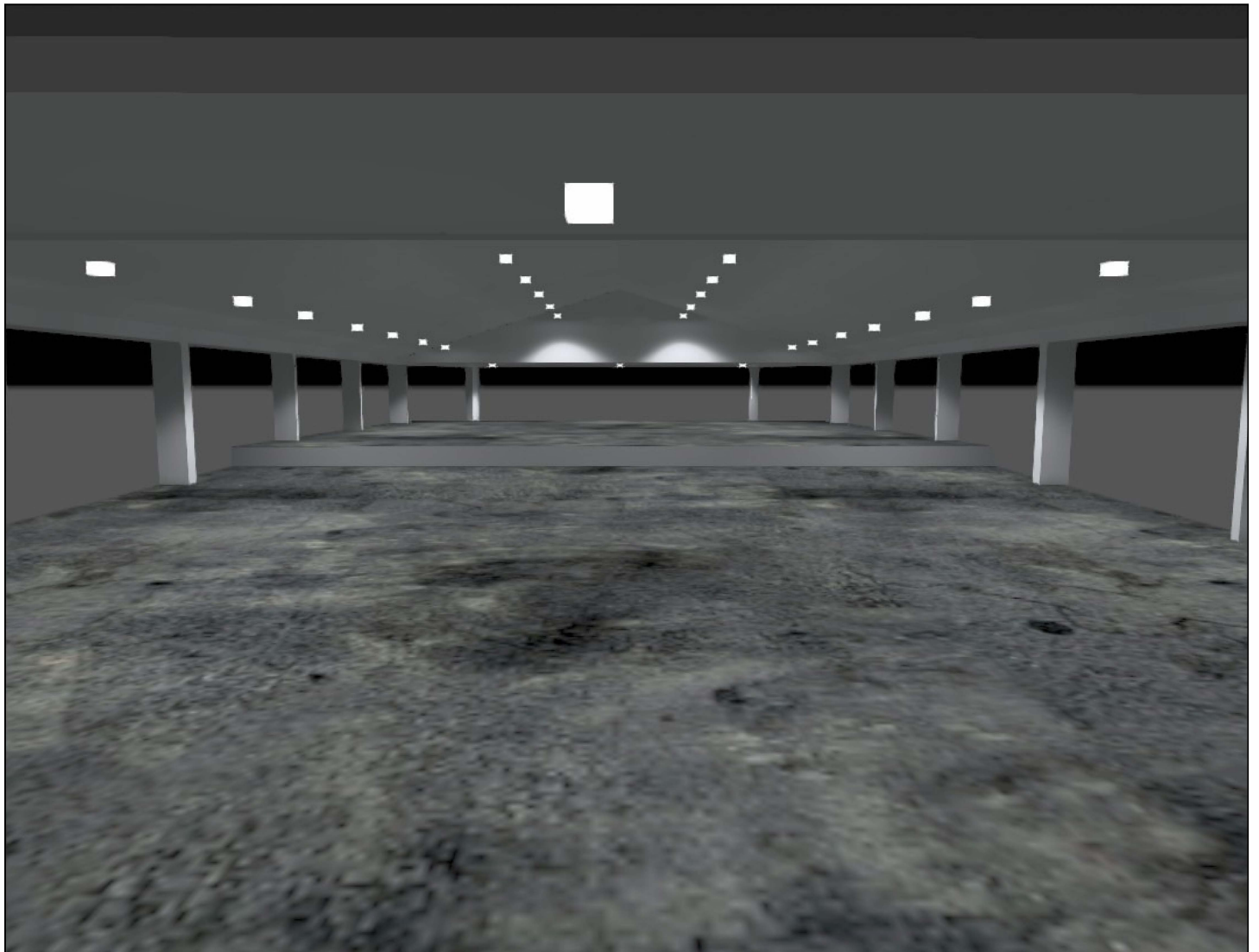
Above v2.1 - FC, Illuminance values in [lx]



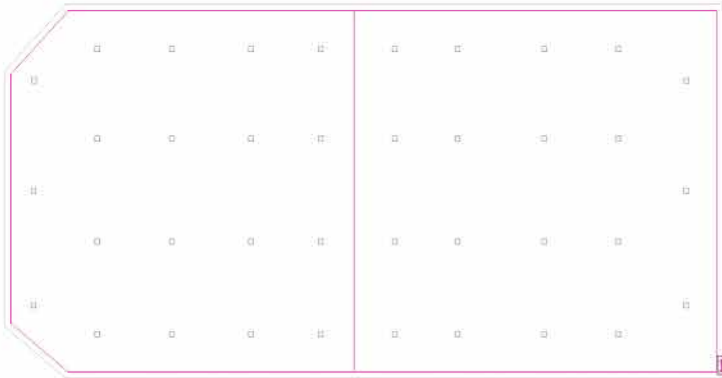
Top v2.1



Lower v2.1



Ray Grace Pavillion



Clearance height: 4.100 m to 10.500 m, Reflection factors: Ceiling 61.1%, Walls 12.5%, Floor 20.0%, Light loss factor: 0.80

#	Luminaire	Φ (Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
38	Empyrean Lighting - Andromeda-C-Flood-110-LK81	13201	110.0	120.0
	Total via all luminaires	501638	4180.0	120.0

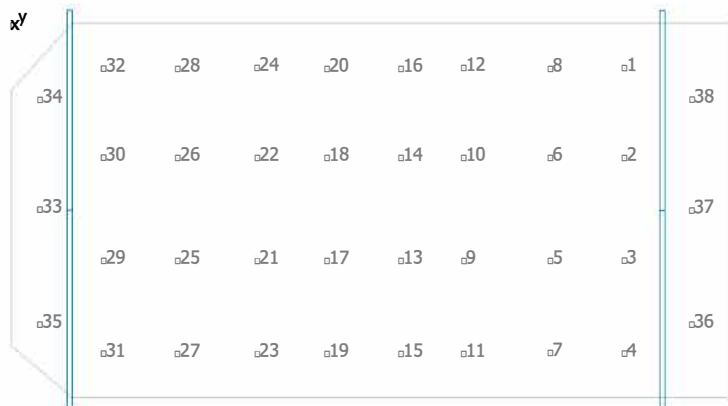
Lighting power density: 2.59 W/m² (Floor area of room 1616.09 m²),
Lighting power density: 2.72 W/m² (Area of working plane 1534.46 m²)

The energy consumption quantities refer to the lights planned for the room without taking into account light scenes and their dimming levels.

Consumption: 11500 kWh/a of maximum 56600 kWh/a

LENI: 7 kWh/a/m² of maximum 35 kWh/a/m²

Ray Grace Pavillion

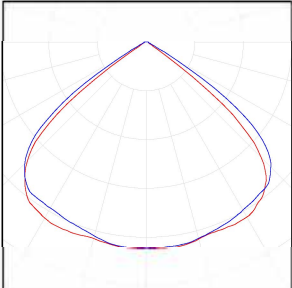


Empyrean Lighting Andromeda-C-Flood-110-LK81

No.	X [m]	Y [m]	Mounting height [m]
1	3.514	47.901	6.700
2	10.514	47.901	8.700
3	18.514	47.901	8.700
4	25.764	47.901	6.700
5	18.514	42.128	8.700
6	10.514	42.128	8.700
7	25.764	42.128	6.700
8	3.514	42.128	6.700
9	18.514	35.349	8.700
10	10.514	35.349	8.700
11	25.764	35.349	6.700
12	3.514	35.349	6.700
13	18.514	30.450	8.700
14	10.514	30.450	8.700
15	25.764	30.450	6.700
16	3.514	30.450	6.700
17	18.514	24.678	8.700
18	10.514	24.678	8.700
19	25.764	24.678	6.700
20	3.514	24.678	6.700
21	18.514	19.223	8.700
22	10.514	19.223	8.700
23	25.764	19.223	6.700
24	3.514	19.223	6.700
25	18.514	13.053	8.700
26	10.514	13.053	8.700
27	25.764	13.053	6.700
28	3.514	13.053	6.700
29	18.514	7.227	8.700
30	10.514	7.227	8.700
31	25.764	7.227	6.700
32	3.514	7.227	6.700
33	14.595	2.275	5.700

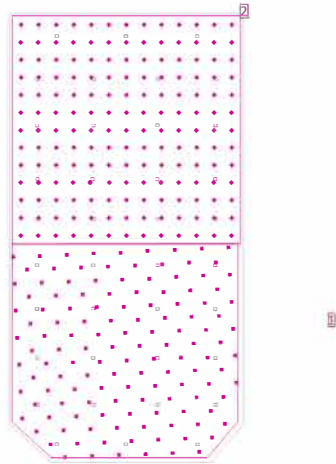
No.	X [m]	Y [m]	Mounting height [m]
34	5.962	2.301	5.700
35	23.510	2.276	5.700
36	23.510	53.177	5.700
37	14.595	53.177	5.700
38	5.962	53.203	5.700

Ray Grace Pavillion

Quantity	Luminaire (Luminous emittance)		
38	<p>Empyrean Lighting - Andromeda-C-Flood-110-LK81 Luminous emittance 1 Fitting: 1x Light output ratio: 100.01% Lamp luminous flux: 13200 lm Luminaire luminous flux: 13201 lm Power: 110.0 W Luminous efficacy: 120.0 lm/W</p> <p>Colorimetric data 1x: CCT 5000 K, CRI 70</p>	<p>See our luminaire catalog for an image of the luminaire.</p>	 A light distribution diagram showing a wide, symmetrical beam spread. The diagram consists of a grid of concentric circles and radial lines, with a blue and red outline representing the light distribution pattern.

Total lamp luminous flux: 501600 lm, Total luminaire luminous flux: 501638 lm, Total Load: 4180.0 W, Luminous efficacy: 120.0 lm/W

Ray Grace Pavillion

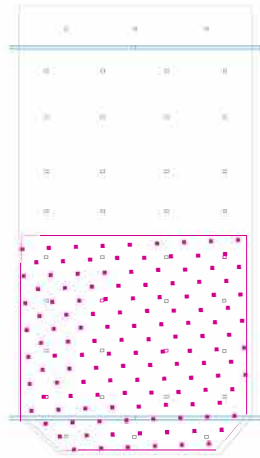


Clearance height: 4.100 m to 10.500 m, Reflection factors: Ceiling 61.1%, Walls 12.5%, Floor 20.0%, Light loss factor: 0.80

General

Surface	Result	Average	Min	Max	Min/average	Min/max
1 Calculation surface 1 - Top Level	Perpendicular illuminance [lx] Height: 1.600 m	240	100	362	0.42	0.28
2 Calculation surface 2 - Lower Level	Perpendicular illuminance [lx] Height: 0.435 m	221	91.6	302	0.41	0.30

Calculation surface 1 - Top Level / Perpendicular illuminance



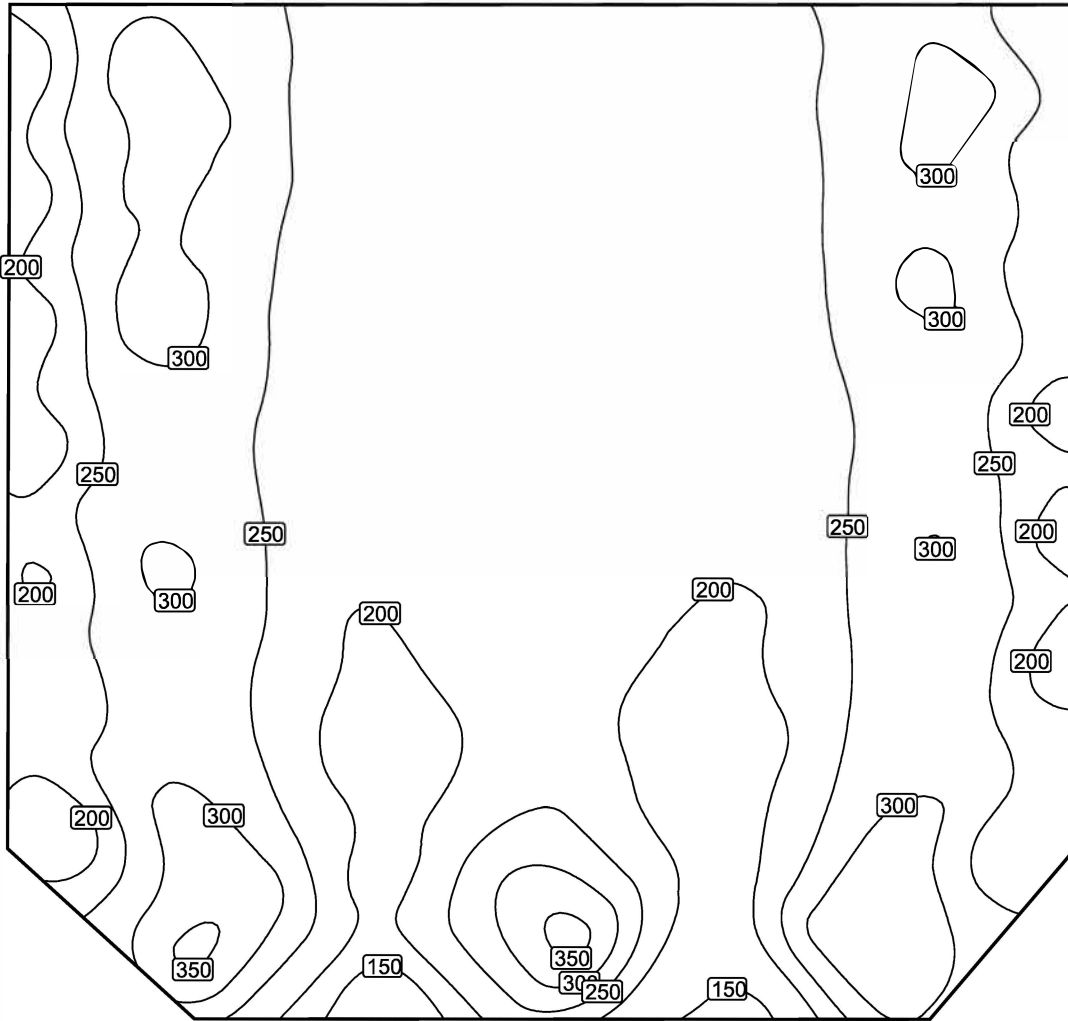
Calculation surface 1 - Top Level: Perpendicular illuminance (Grid)

Light scene: Light scene 1

Average: 240 lx, Min: 100 lx, Max: 362 lx, Min/average: 0.42, Min/max: 0.28

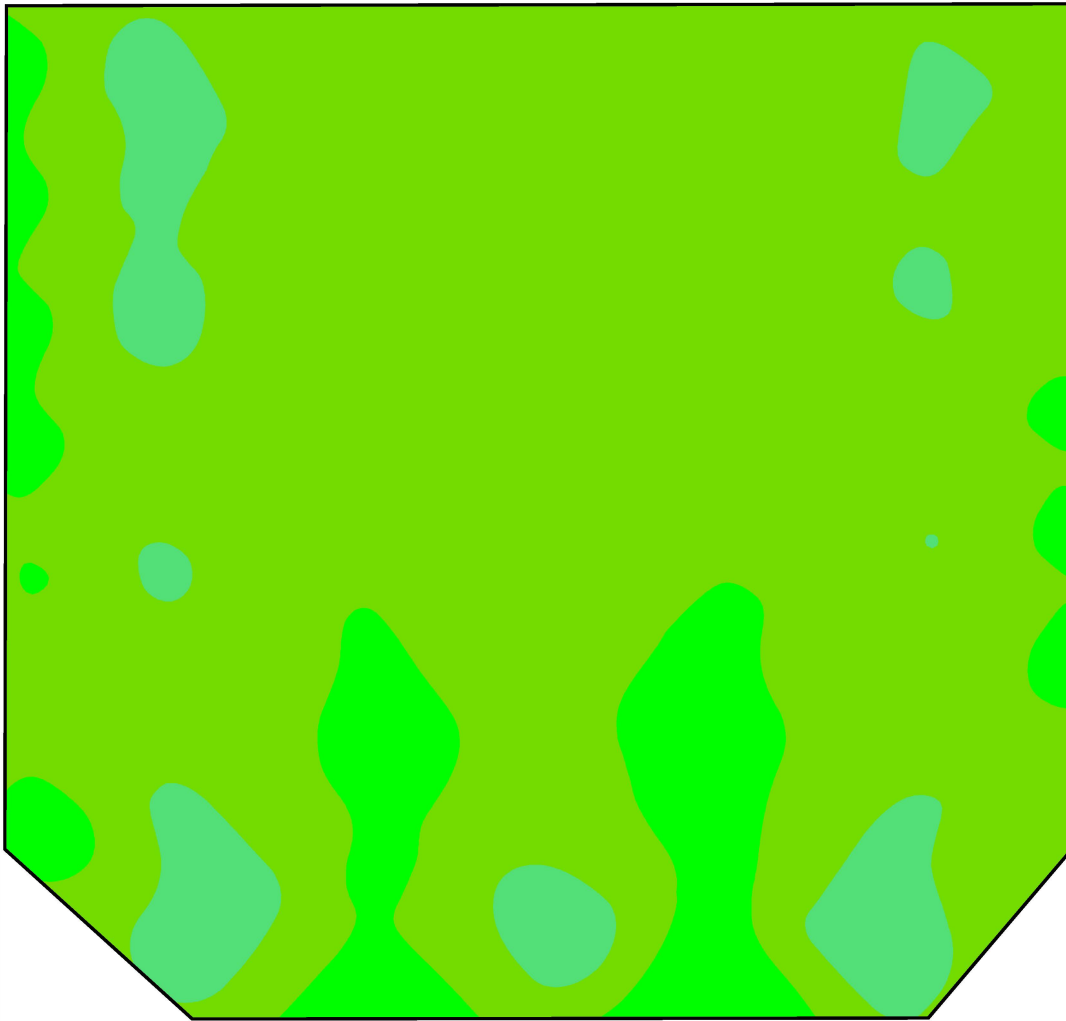
Height: 1.600 m

Isolines [lx]



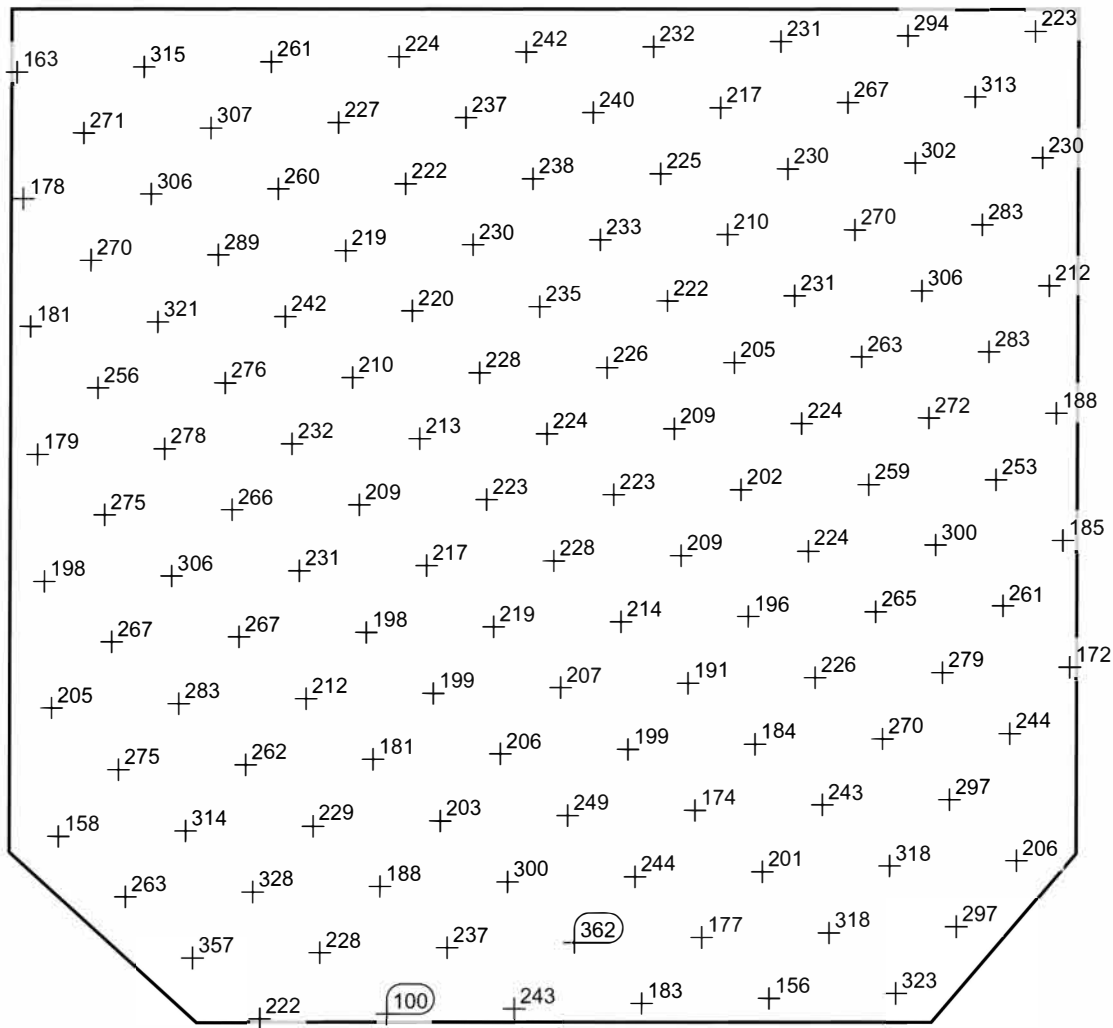
Scale: 1 : 200

False colors [lx]



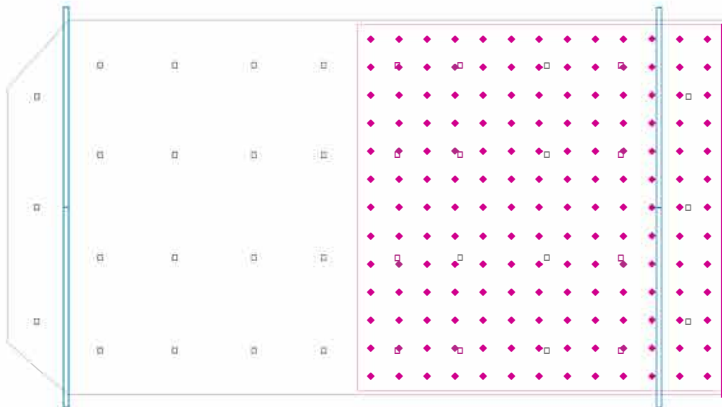
Scale: 1 : 200

Value grid [lx]



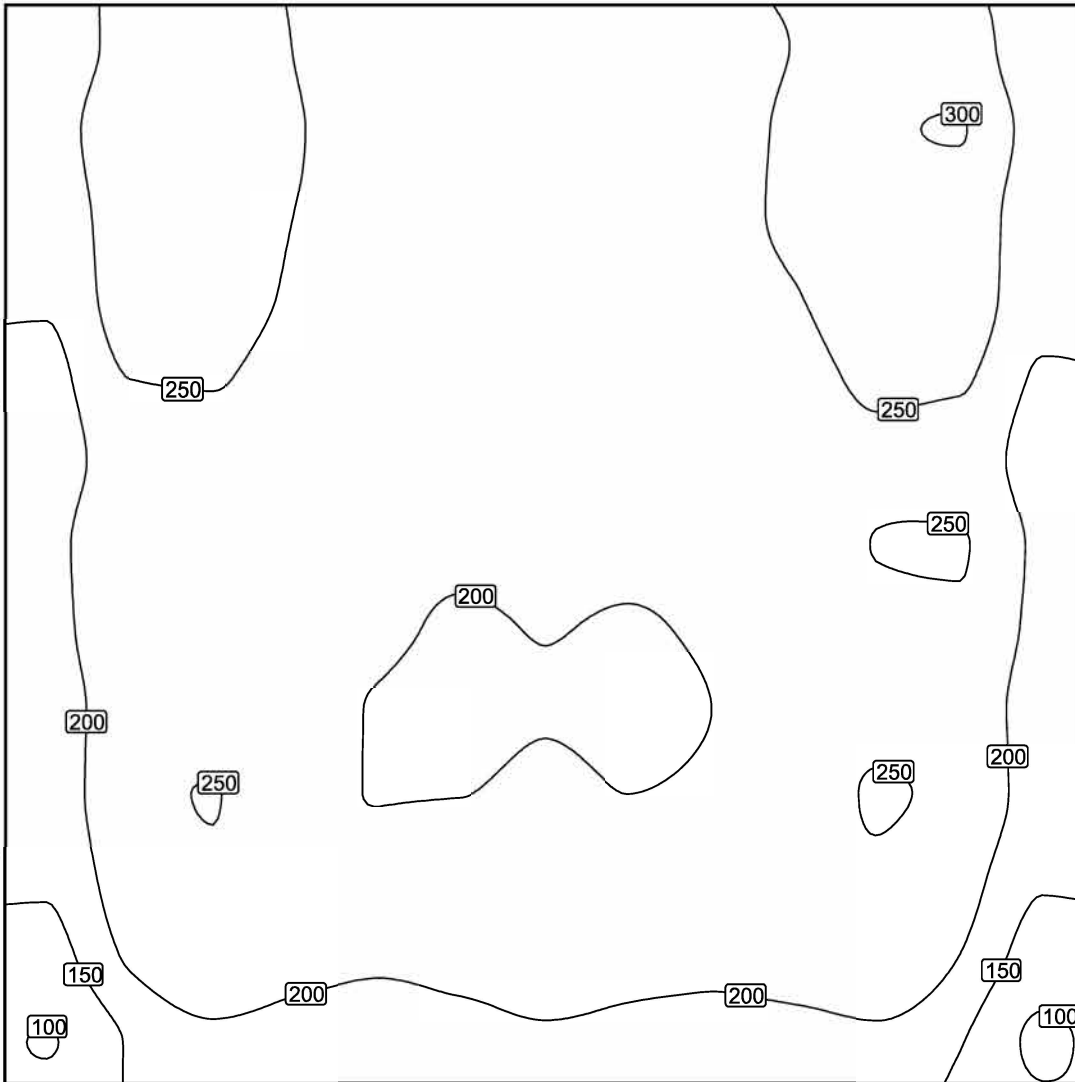
Scale: 1 : 200

Calculation surface 2 - Lower Level / Perpendicular illuminance



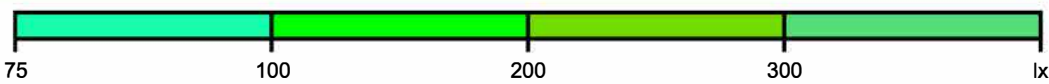
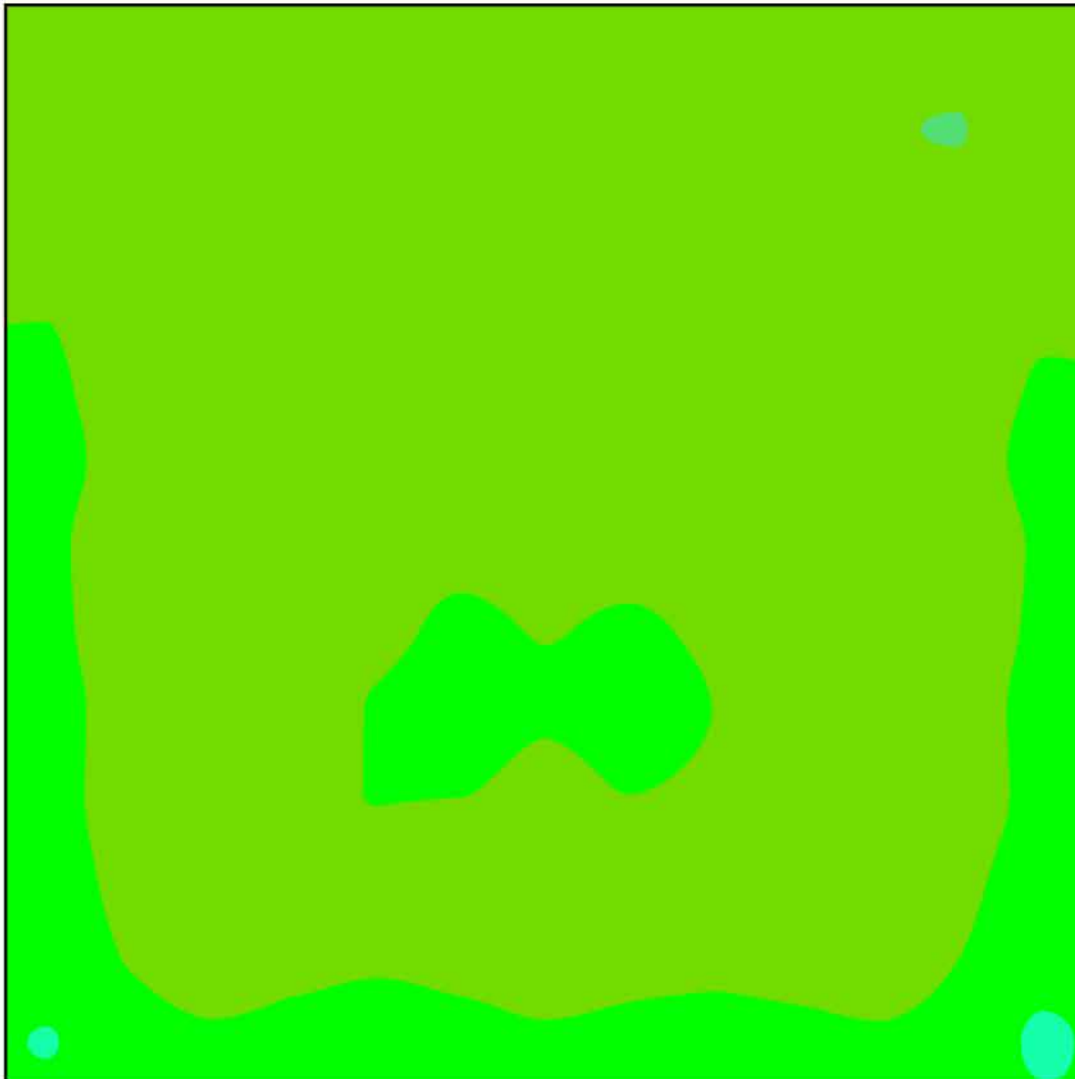
Calculation surface 2 - Lower Level: Perpendicular illuminance (Grid)
Light scene: Light scene 1
Average: 221 lx, Min: 91.6 lx, Max: 302 lx, Min/average: 0.41, Min/max: 0.30
Height: 0.435 m

Isolines [lx]



Scale: 1 : 200

False colors [lx]



Scale: 1 : 200

Value grid [lx]

+205	+272	+277	+249	+227	+231	+240	+234	+233	+251	+283	+278	+211
+221	+296	+291	+253	+233	+232	+238	+235	+235	+259	+295	(302)	+227
+215	+279	+278	+250	+235	+228	+235	+231	+237	+259	+286	+284	+218
+205	+274	+273	+243	+223	+221	+228	+223	+231	+248	+276	+280	+213
+187	+250	+253	+226	+214	+212	+217	+214	+216	+234	+256	+255	+195
+177	+230	+238	+220	+207	+206	+213	+208	+211	+226	+244	+235	+180
+187	+248	+248	+222	+207	+204	+209	+206	+211	+226	+251	+252	+192
+185	+242	+242	+218	+207	+196	+201	+198	+205	+225	+245	+244	+189
+178	+230	+239	+217	+197	+188	+198	+191	+200	+221	+243	+234	+180
+171	+242	+251	+220	+199	+199	+211	+200	+206	+228	+252	+244	+177
+156	+230	+248	+219	+214	+218	+227	+212	+220	+238	+247	+224	+156
+133	+206	+244	+220	+208	+220	+240	+221	+216	+233	+245	+199	+127
+98	+154	+186	+172	+162	+172	+189	+181	+172	+176	+186	+153	(92)

Scale: 1 : 200