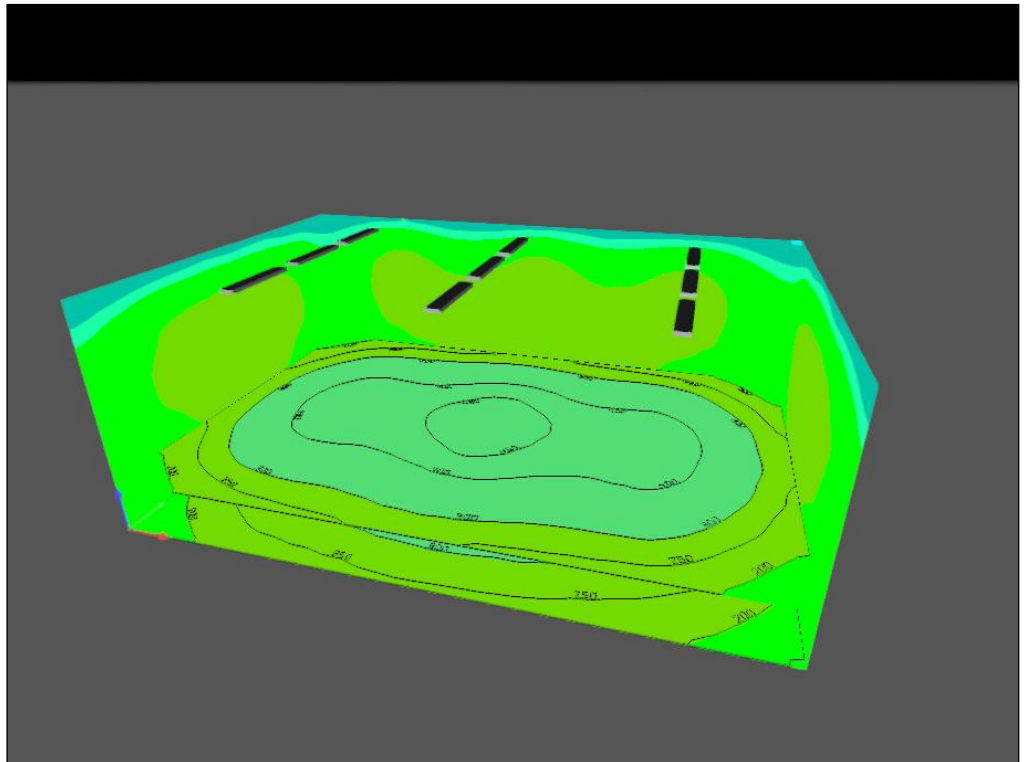
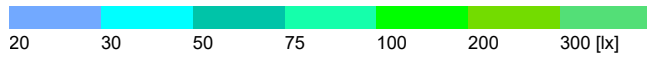
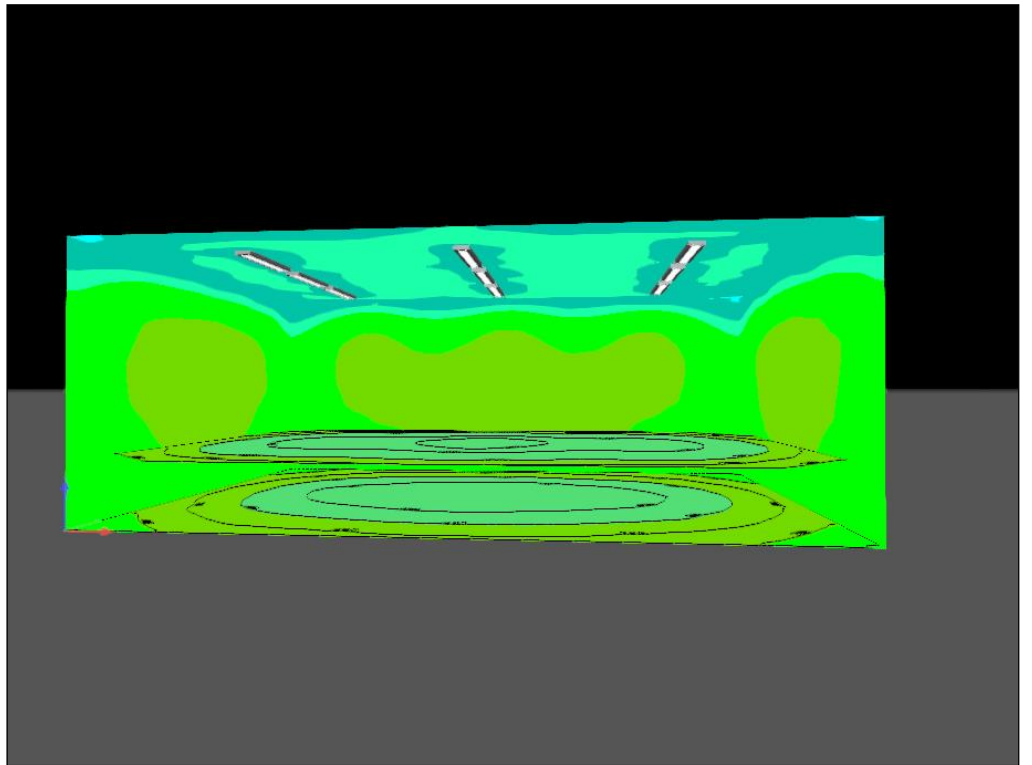
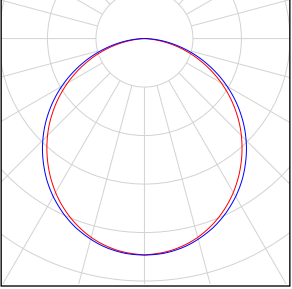


Project scoala 11

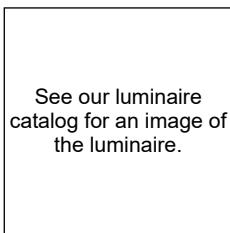


Project scoala 11

Quantity	Luminaire (Luminous emittance)		
9	Philips - W20L120 Luminous emittance 1 Fitting: 1xLED32S Light output ratio: 99.97% Lamp luminous flux: 3200 lm Luminaire luminous flux: 3199 lm Power: 36.0 W Luminous efficacy: 88.9 lm/W Colorimetric data 1x: CCT 3000 K, CRI 100	See our luminaire catalog for an image of the luminaire.	

Total lamp luminous flux: 28800 lm, Total luminaire luminous flux: 28791 lm, Total Load: 324.0 W, Luminous efficacy: 88.9 lm/W

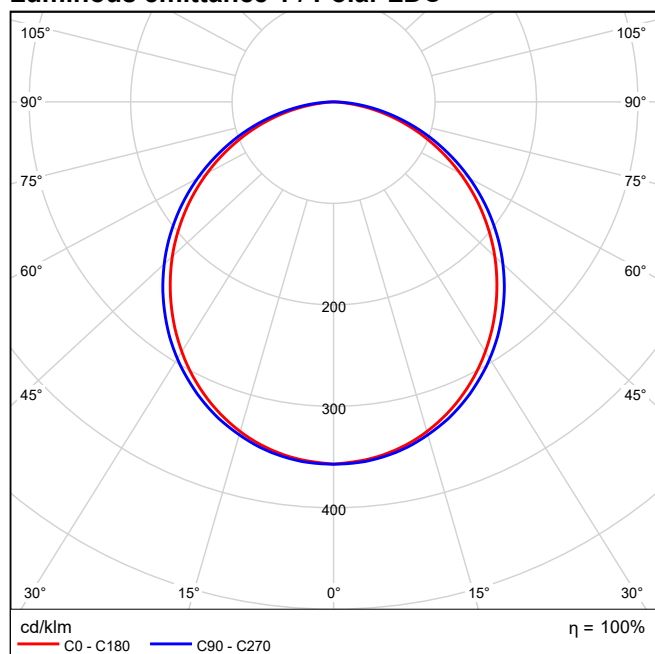
Philips W20L120 1xLED32S



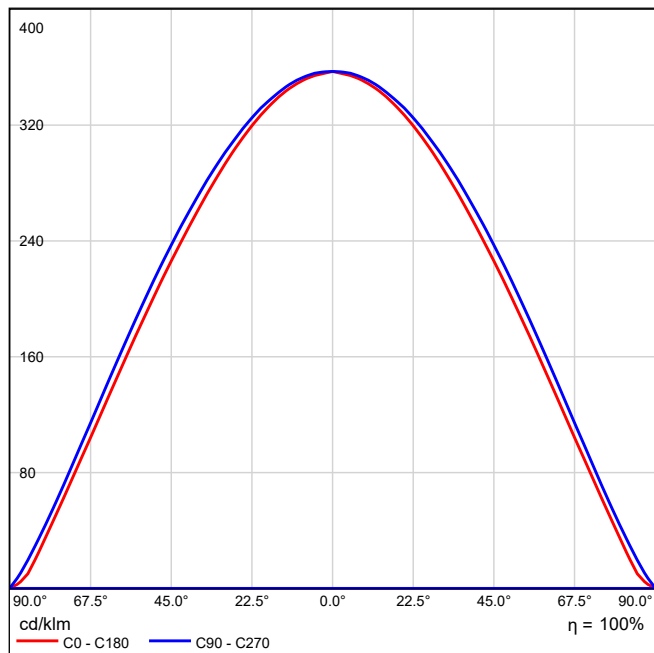
Light output ratio: 99.97%
Lamp luminous flux: 3200 lm
Luminaire luminous flux: 3199 lm
Power: 36.0 W
Luminous efficacy: 88.9 lm/W

Colorimetric data
1x: CCT 3000 K, CRI 100

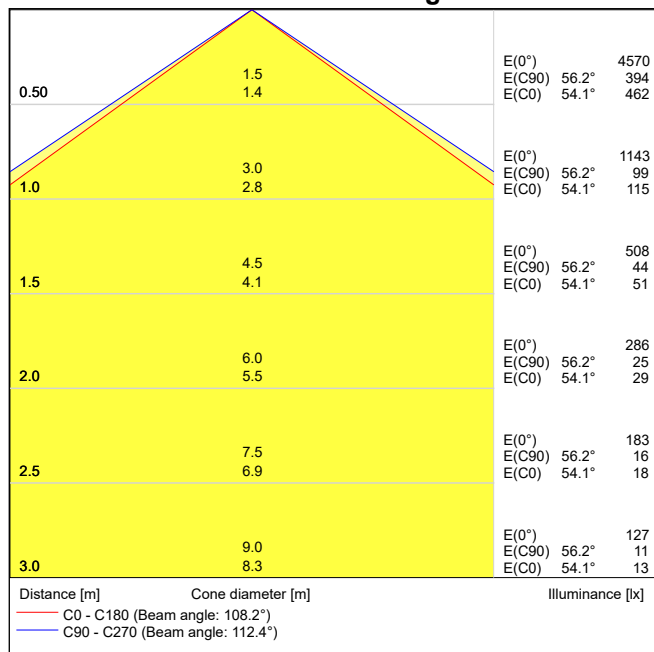
Luminous emittance 1 / Polar LDC



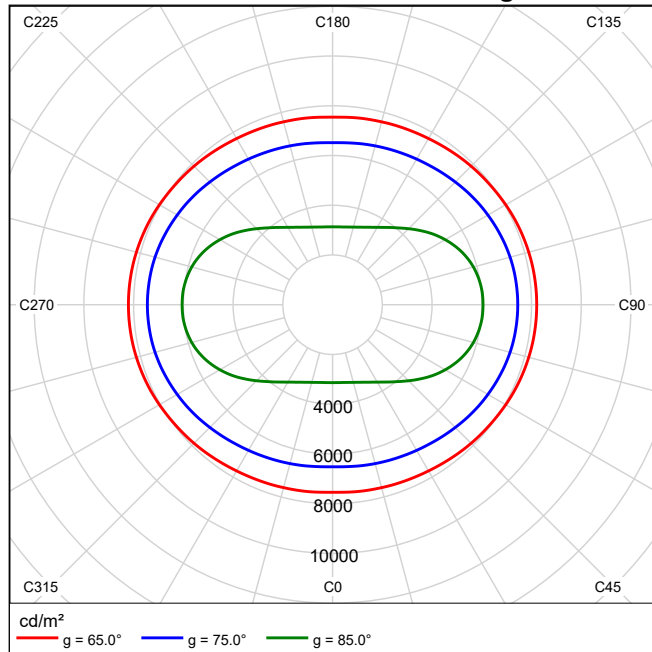
Luminous emittance 1 / Linear LDC



Luminous emittance 1 / Cone diagram



Luminous emittance 1 / Luminance diagram

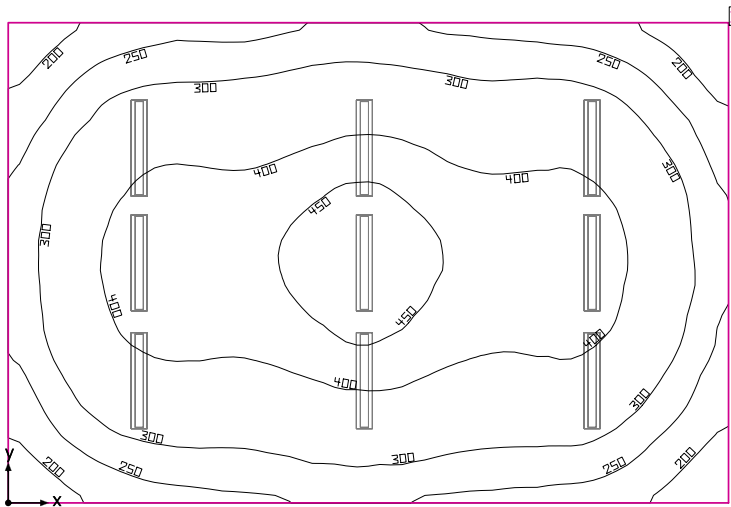


Luminous emittance 1 / UGR diagram

Glare evaluation according to UGR												
ρ Ceiling		70	70	50	50	30	70	70	50	50	30	30
ρ Walls		50	30	50	30	30	50	30	50	30	50	30
ρ Floor		20	20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	19.9	21.2	20.2	21.4	21.7	20.2	21.5	20.5	21.7	22.0	22.0
	3H	21.4	22.6	21.7	22.9	23.1	21.8	23.0	22.1	23.3	23.6	23.6
	4H	22.0	23.1	22.3	23.4	23.7	22.5	23.6	22.8	23.9	24.2	24.2
	6H	22.4	23.5	22.8	23.8	24.1	23.0	24.1	23.4	24.4	24.7	24.7
	8H	22.5	23.5	22.9	23.8	24.2	23.2	24.2	23.5	24.5	24.8	24.8
	12H	22.5	23.5	22.9	23.8	24.2	23.3	24.3	23.7	24.6	24.9	24.9
4H	2H	20.6	21.7	20.9	22.0	22.3	20.8	22.0	21.2	22.3	22.5	22.5
	3H	22.3	23.3	22.7	23.6	23.9	22.7	23.6	23.0	24.0	24.3	24.3
	4H	23.0	23.9	23.4	24.2	24.6	23.5	24.3	23.9	24.7	25.0	25.0
	6H	23.6	24.3	24.0	24.7	25.1	24.1	24.9	24.5	25.2	25.6	25.6
	8H	23.7	24.4	24.1	24.8	25.2	24.4	25.0	24.8	25.4	25.9	25.9
	12H	23.8	24.4	24.2	24.8	25.2	24.5	25.1	25.0	25.6	26.0	26.0
8H	4H	23.4	24.1	23.8	24.5	24.9	23.8	24.5	24.2	24.8	25.3	25.3
	6H	24.0	24.6	24.5	25.0	25.5	24.6	25.1	25.0	25.5	26.0	26.0
	8H	24.2	24.7	24.7	25.2	25.7	24.9	25.4	25.3	25.8	26.3	26.3
	12H	24.3	24.8	24.8	25.2	25.7	25.1	25.5	25.6	26.0	26.5	26.5
12H	4H	23.4	24.0	23.9	24.4	24.9	23.8	24.4	24.2	24.8	25.2	25.2
	6H	24.1	24.6	24.6	25.0	25.5	24.6	25.1	25.1	25.5	26.0	26.0
	8H	24.3	24.8	24.8	25.2	25.7	25.0	25.4	25.4	25.8	26.3	26.3
Variation of the observer position for the luminaire distances S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.4					+0.2 / -0.3					
S = 2.0H		+0.4 / -0.7					+0.4 / -0.6					
Standard table		BK06					BK06					
Correction Summand		7.0					7.6					
Corrected glare indices referring to 3200lm Total luminous flux												

The UGR values are calculated in acc. with CIE Publ. 117. Spacing-to-height ratio = 0.25

Room 1



Clearance height: 3.400 m, Reflection factors: Ceiling 70.0%, Walls 50.0%, Floor 20.0%, Light loss factor: 0.80

Workplane

Surface	Result	Average (Target)	Min	Max	Min/average	Min/max
1 Workplane (Room 1)	Perpendicular illuminance (adaptive) [lx] Height: 0.800 m, Wall zone: 0.000 m	340 (≥ 500)	153	483	0.45	0.32

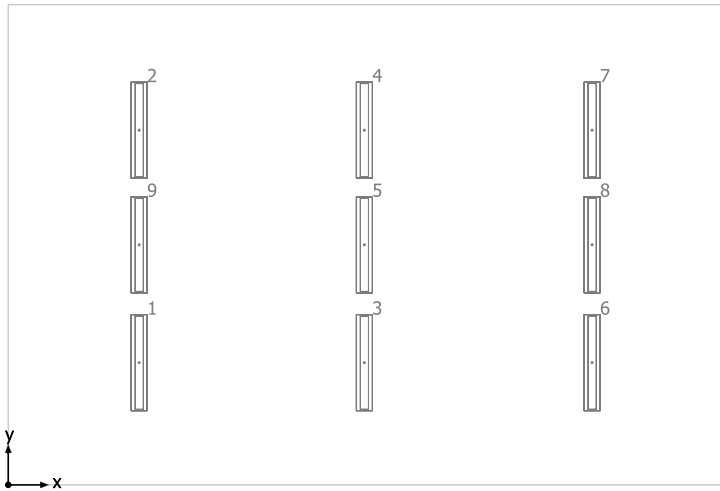
# Luminaire	Φ(Luminaire) [lm]	Power [W]	Luminous efficacy [lm/W]
9 Philips - W20L120	3199	36.0	88.9
Total via all luminaires	28791	324.0	88.9

Lighting power density: $6.00 \text{ W/m}^2 = 1.76 \text{ W/m}^2/100 \text{ lx}$ (Floor area of room 54.00 m^2)

Consumption: 890 kWh/a of maximum 1900 kWh/a

The energy consumption quantities do not take into account light scenes and their dimming levels.

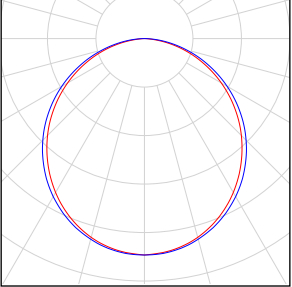
Room 1



Philips W20L120

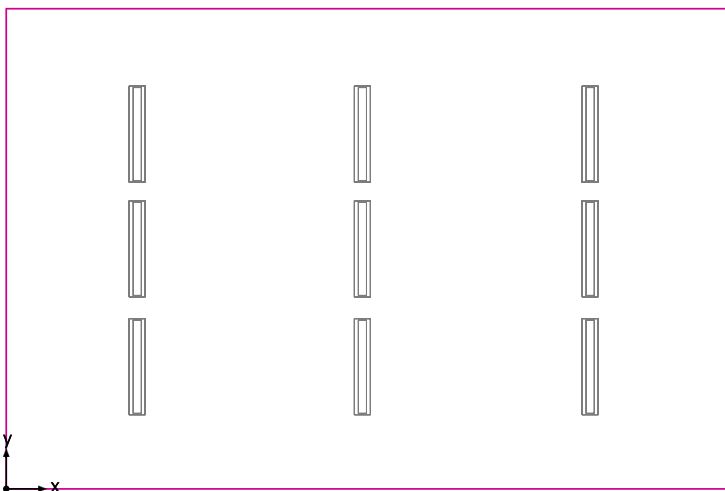
No.	X [m]	Y [m]	Mounting height [m]	Light loss factor
1	1.636	1.527	3.400	0.80
2	1.636	4.432	3.400	0.80
3	4.450	1.527	3.400	0.80
4	4.450	4.432	3.400	0.80
5	4.450	3.000	3.400	0.80
6	7.296	1.527	3.400	0.80
7	7.296	4.432	3.400	0.80
8	7.296	3.000	3.400	0.80
9	1.636	3.000	3.400	0.80

Room 1

Quantity	Luminaire (Luminous emittance)		
9	Philips - W20L120 Luminous emittance 1 Fitting: 1xLED32S Light output ratio: 99.97% Lamp luminous flux: 3200 lm Luminaire luminous flux: 3199 lm Power: 36.0 W Luminous efficacy: 88.9 lm/W Colorimetric data 1x: CCT 3000 K, CRI 100	See our luminaire catalog for an image of the luminaire.	

Total lamp luminous flux: 28800 lm, Total luminaire luminous flux: 28791 lm, Total Load: 324.0 W, Luminous efficacy: 88.9 lm/W

Workplane (Room 1) / Perpendicular illuminance (adaptive)



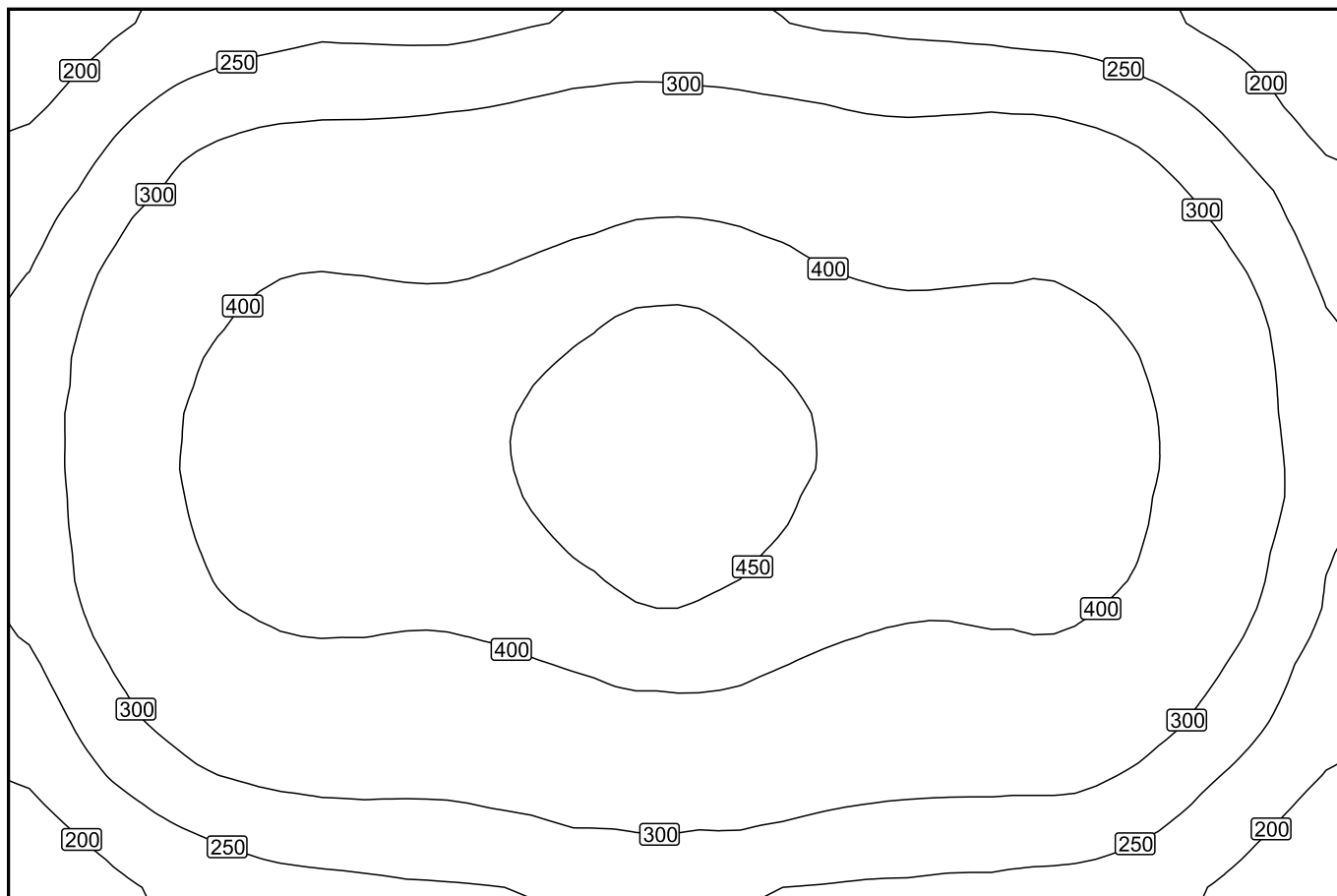
Workplane (Room 1): Perpendicular illuminance (adaptive) (Surface)

Light scene: Light scene 1

Average: 340 lx (Target: ≥ 500 lx), Min: 153 lx, Max: 483 lx, Min/average: 0.45, Min/max: 0.32

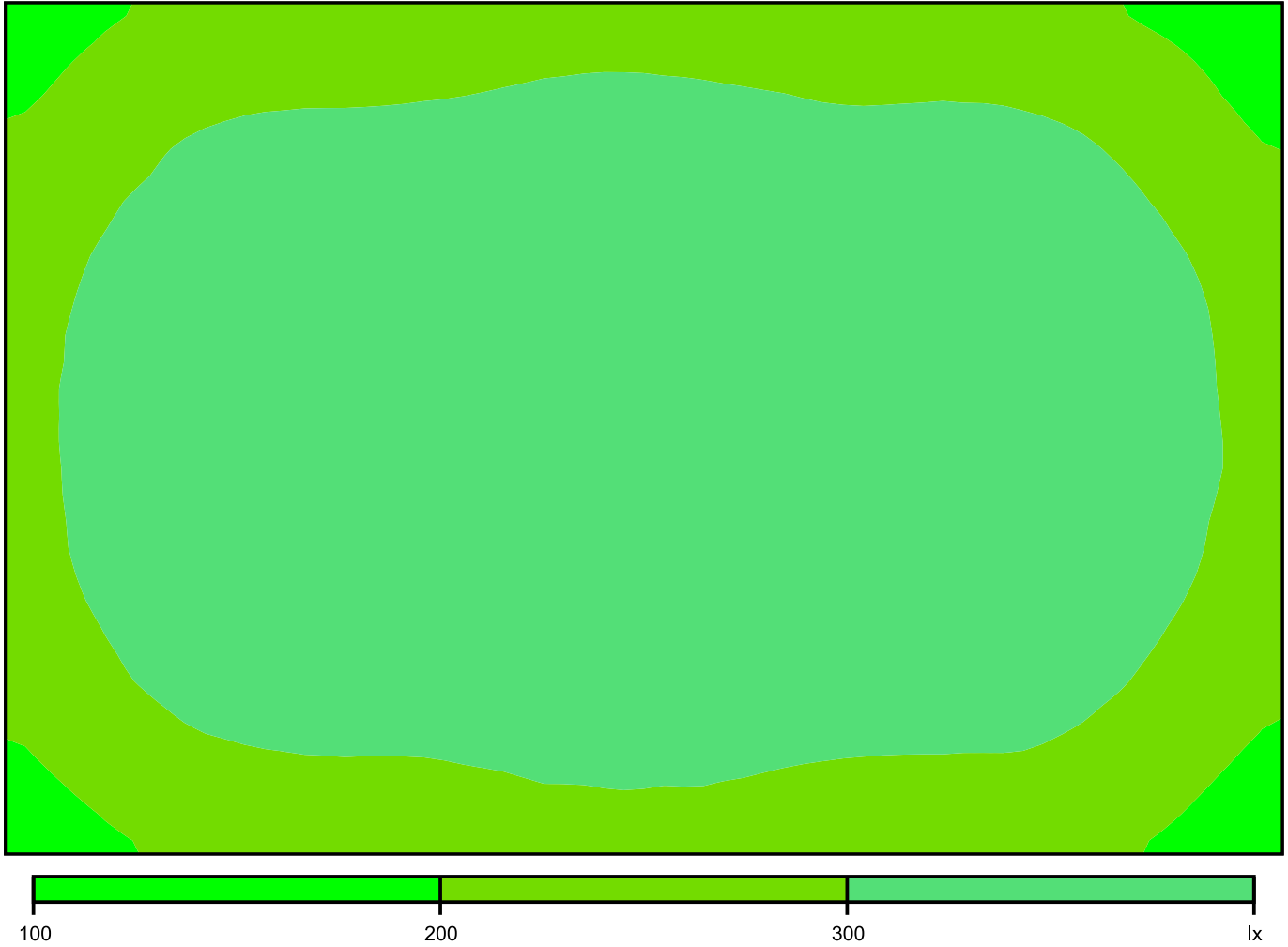
Height: 0.800 m, Wall zone: 0.000 m

Isolines [lx]



Scale: 1 : 50

False colors [lx]



Scale: 1 : 50

Value grid [lx]

+199	+251	+268	+274	+292	+288	+274	+269	+246	(190)
+254	+333	+355	+360	+382	+381	+353	+355	+327	+249
+297	+392	+422	+422	+453	+446	+416	+419	+387	+291
+309	+419	+444	+444	(475)	+471	+437	+438	+408	+303
+300	+397	+422	+422	+451	+448	+415	+417	+390	+287
+258	+339	+359	+362	+383	+383	+356	+356	+328	+247
+198	+251	+273	+279	+294	+294	+276	+271	+250	+192

Scale: 1 : 50