

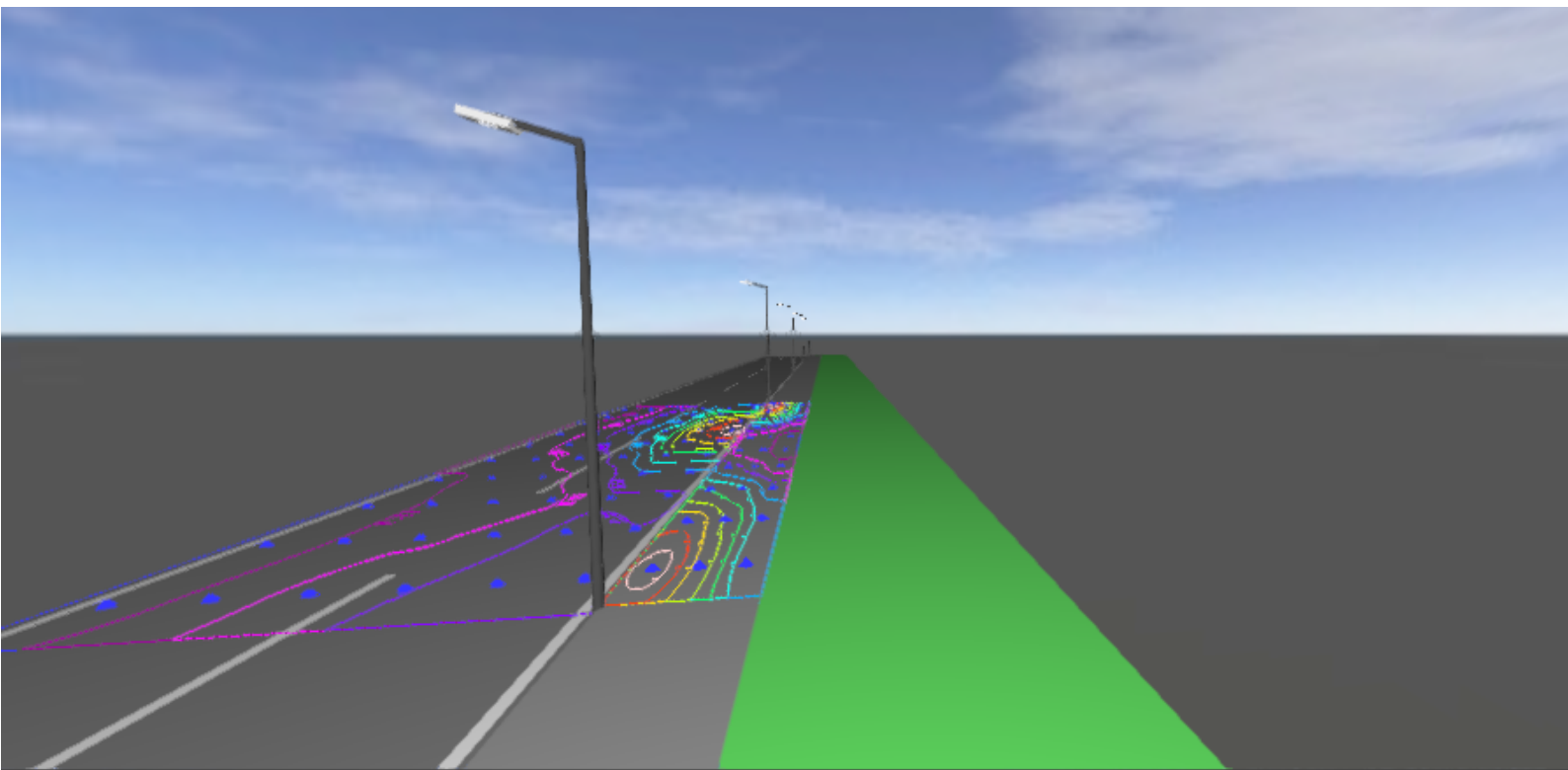
Operator:
Dave

HongKong bosunlighting
co.,LTD
+86 18676024888
sale@bosunlighting.com

Date:
2019-09-08



MOONRIVER-30W 7M road and 2M sidewalk with 6M pole



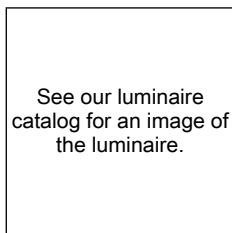
Content

MOONRIVER-30W 7M road and 2M sidewalk with 6M pole

MOONRIVER-30W 7M road and 2M sidewalk with 6M pole

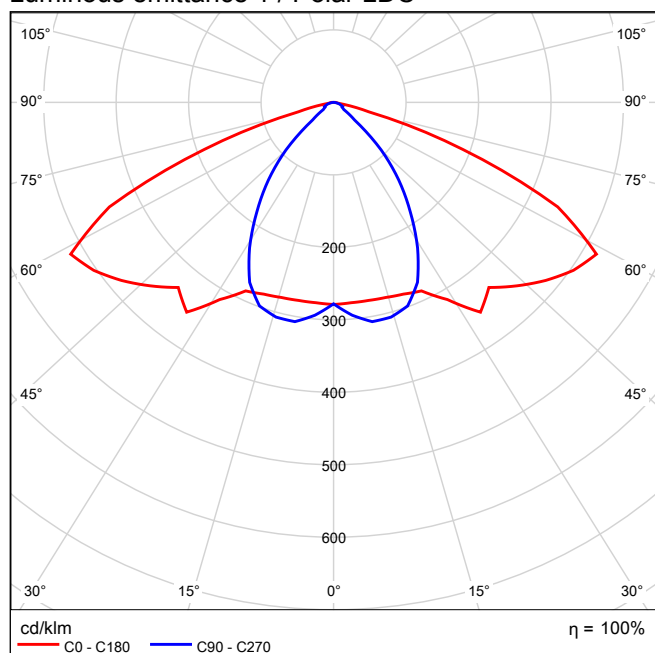
九高 - (1x49).....	3
街道 1: 备选项 1	
Planning results.....	6
街道 1: 备选项 1 / STREET (M5)	
Results summary.....	7
Table.....	8
Isolines.....	11
Value chart.....	14
街道 1: 备选项 1 / SIDEWALK (P5)	
Results summary.....	17
Table.....	18
Isolines.....	19
Value chart.....	20

九高 1x49

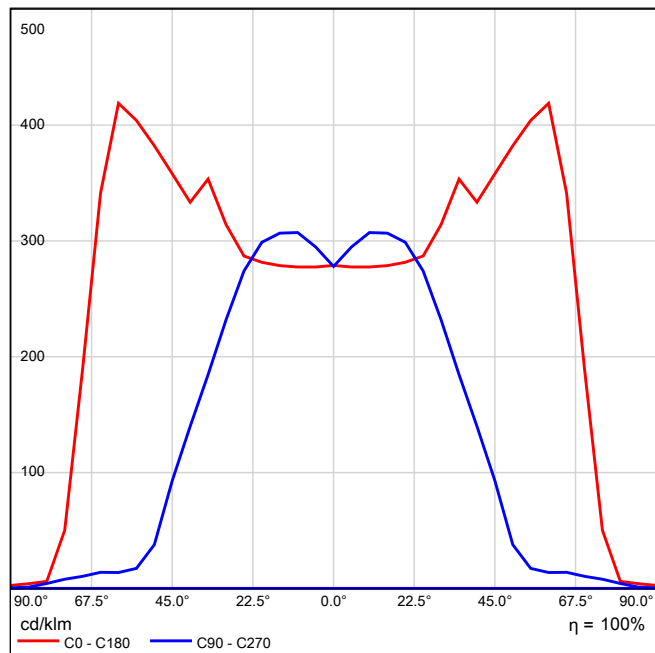


Light output ratio: 100.11%
Lamp luminous flux: 4463 lm
Luminaire luminous flux: 4468 lm
Power: 29.9 W
Luminous efficacy: 149.4 lm/W

Luminous emittance 1 / Polar LDC

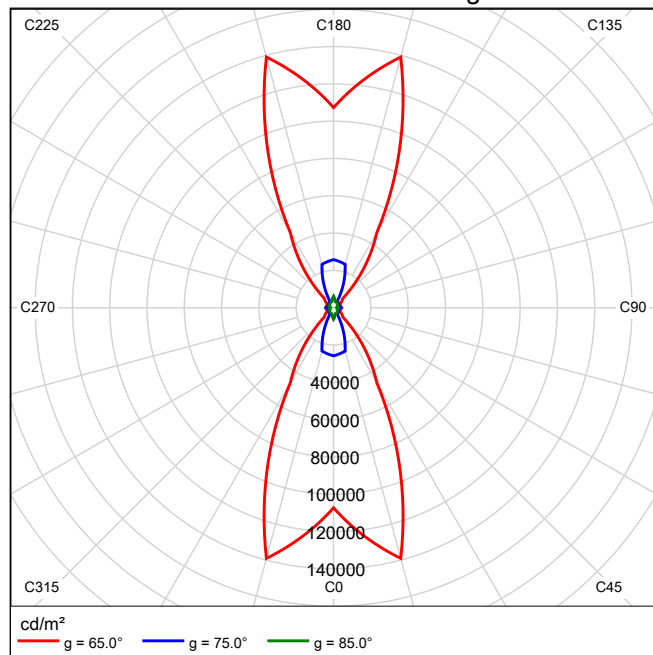


Luminous emittance 1 / Linear LDC



It is not possible to generate a cone diagram, as the light distribution is asymmetrical.

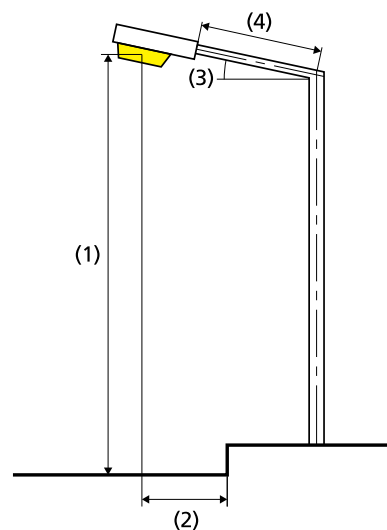
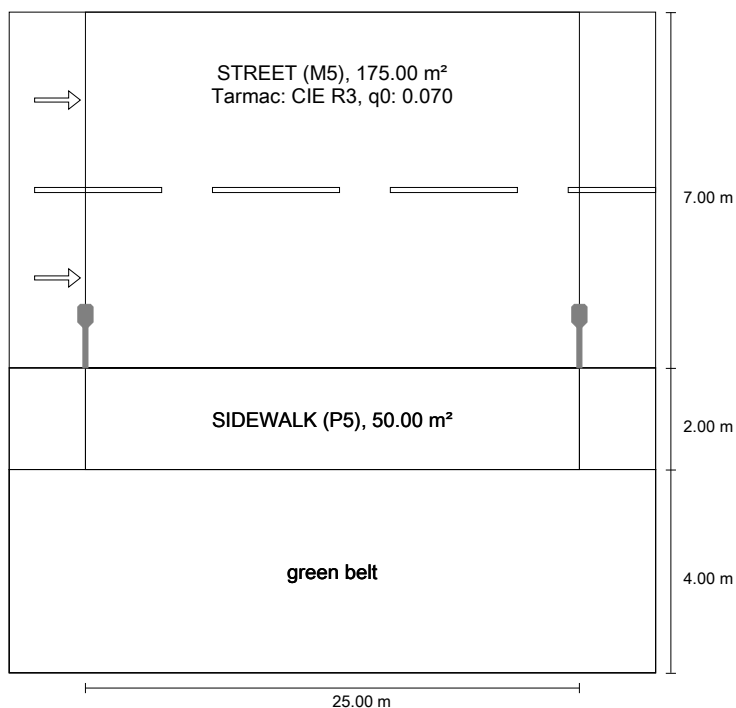
Luminous emittance 1 / Luminance diagram



It is not possible to generate a UGR diagram, as the light distribution is asymmetrical.

街道 1 according to EN 13201:2015

九高



Results for valuation fields

Light loss factor: 0.67

STREET (M5)

Lm [cd/m²] ≥ 0.50	Uo ≥ 0.35	UI ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✓ 0.62	✓ 0.42	✓ 0.44	✓ 9	✓ 0.41

SIDEWALK (P5)

Emin [lx] ≥ 0.60	Em [lx]
✓ 3.15	* 9.68

* Informative, not part of the valuation

Results for energy efficiency indicators

Power density indicator (Dp)	0.013 W/lxm²
Energy consumption density	
Arrangement: 30W Moon river 1_IESNA2002.IES (119.6 kWh/yr)	0.5 kWh/m² yr

Lamp:	1x49
Luminous flux (luminaire):	4467.89 lm
Luminous flux (lamp):	4462.90 lm
Operating Hours	
4000 h:	100.0 %, 29.9 W
W/km:	1196.0
Arrangement:	single side bottom
Pole distance:	25.000 m
Boom inclination (3):	15.0°
Boom length (4):	1.008 m
Light centre height (1):	6.000 m
Light overhang (2):	1.000 m

ULR:	0.00
ULOR:	0.00

Maximum luminous intensities	
at 70° and above	428 cd/klm *
at 80° and above	53.0 cd/klm *
at 90° and above	7.91 cd/klm *
Luminous intensity class:	G*3

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

* Luminous intensity values in [cd/klm] for calculating luminous intensity class refer to the output flux of the luminaire, according EN 13201:2015.

Arrangement complies with glare index class D.5

STREET (M5)

Light loss factor: 0.67
Grid: 10 x 6 Points

Lm [cd/m ²] ≥ 0.50	Uo ≥ 0.35	UI ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✓ 0.62	✓ 0.42	✓ 0.44	✓ 9	✓ 0.41

Assigned observer (2):

Observer	Position [m]	Lm [cd/m ²] ≥ 0.50	Uo ≥ 0.35	UI ≥ 0.40	TI [%] ≤ 15
Observer 1	(-60.000, 7.750, 1.500)	0.62	0.43	0.44	9
Observer 2	(-60.000, 11.250, 1.500)	0.65	0.42	0.66	8

STREET (M5)

Horizontal illuminance [lx]

12.417	8.62	7.91	7.16	5.90	5.54	5.54	5.90	7.16	7.91	8.62
11.250	12.8	10.9	8.67	6.96	5.99	5.99	6.96	8.67	10.9	12.8
10.083	17.1	13.9	9.95	7.10	5.79	5.79	7.10	9.95	13.9	17.1
8.917	19.5	15.2	9.87	6.74	5.26	5.26	6.74	9.87	15.2	19.5
7.750	23.1	18.0	11.3	7.42	5.31	5.31	7.42	11.3	18.0	23.1
6.583	23.1	18.3	12.8	8.42	5.38	5.38	8.42	12.8	18.3	23.1
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 6 Points

Em [lx]	Emin [lx]	Emax [lx]	g1	g2
10.8	5.26	23.1	0.487	0.228

Observer 1

Luminance with dry roadway [cd/m²]

12.417	0.27	0.27	0.29	0.31	0.37	0.39	0.37	0.34	0.29	0.27
11.250	0.39	0.35	0.34	0.37	0.42	0.48	0.51	0.47	0.42	0.41
10.083	0.51	0.44	0.40	0.42	0.50	0.61	0.67	0.65	0.61	0.56
8.917	0.57	0.49	0.44	0.50	0.63	0.78	0.86	0.79	0.80	0.65
7.750	0.68	0.60	0.56	0.67	0.88	1.15	1.28	1.17	1.03	0.81
6.583	0.66	0.58	0.56	0.68	0.87	1.23	1.50	1.36	1.05	0.80
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 6 Points

Lm [cd/m ²]	Lmin [cd/m ²]	Lmax [cd/m ²]	g1	g2
0.62	0.27	1.50	0.428	0.178

Luminance with new lamp [cd/m²]

12.417	0.40	0.40	0.43	0.46	0.55	0.58	0.55	0.50	0.43	0.40
11.250	0.59	0.52	0.51	0.56	0.63	0.72	0.76	0.70	0.63	0.61
10.083	0.76	0.65	0.60	0.63	0.75	0.91	1.00	0.97	0.92	0.83
8.917	0.85	0.73	0.66	0.74	0.93	1.17	1.28	1.18	1.19	0.97
7.750	1.01	0.90	0.84	1.00	1.32	1.72	1.91	1.75	1.54	1.21
6.583	0.99	0.86	0.84	1.01	1.30	1.83	2.24	2.03	1.57	1.20
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 6 Points

Lm [cd/m ²]	Lmin [cd/m ²]	Lmax [cd/m ²]	g1	g2
0.93	0.40	2.24	0.428	0.178

Observer 2

Luminance with dry roadway [cd/m²]

12.417	0.27	0.27	0.31	0.32	0.39	0.41	0.39	0.35	0.30	0.27
11.250	0.40	0.37	0.37	0.40	0.47	0.53	0.56	0.50	0.44	0.42
10.083	0.53	0.48	0.45	0.48	0.58	0.70	0.75	0.69	0.65	0.57
8.917	0.60	0.54	0.51	0.60	0.77	0.93	0.96	0.84	0.83	0.67
7.750	0.68	0.61	0.58	0.71	0.95	1.24	1.34	1.22	1.05	0.82
6.583	0.64	0.55	0.50	0.58	0.75	1.09	1.39	1.30	1.04	0.79
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 6 Points

Lm [cd/m ²]	Lmin [cd/m ²]	Lmax [cd/m ²]	g1	g2
0.65	0.27	1.39	0.424	0.196

Luminance with new lamp [cd/m²]

12.417	0.41	0.41	0.46	0.48	0.59	0.61	0.58	0.53	0.44	0.41
11.250	0.60	0.55	0.55	0.60	0.71	0.79	0.83	0.75	0.65	0.62
10.083	0.78	0.71	0.67	0.71	0.87	1.04	1.11	1.03	0.97	0.86
8.917	0.90	0.81	0.77	0.89	1.16	1.39	1.43	1.26	1.24	1.00
7.750	1.02	0.91	0.87	1.06	1.41	1.85	2.00	1.82	1.57	1.22
6.583	0.95	0.82	0.75	0.86	1.12	1.63	2.08	1.94	1.55	1.17
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 6 Points

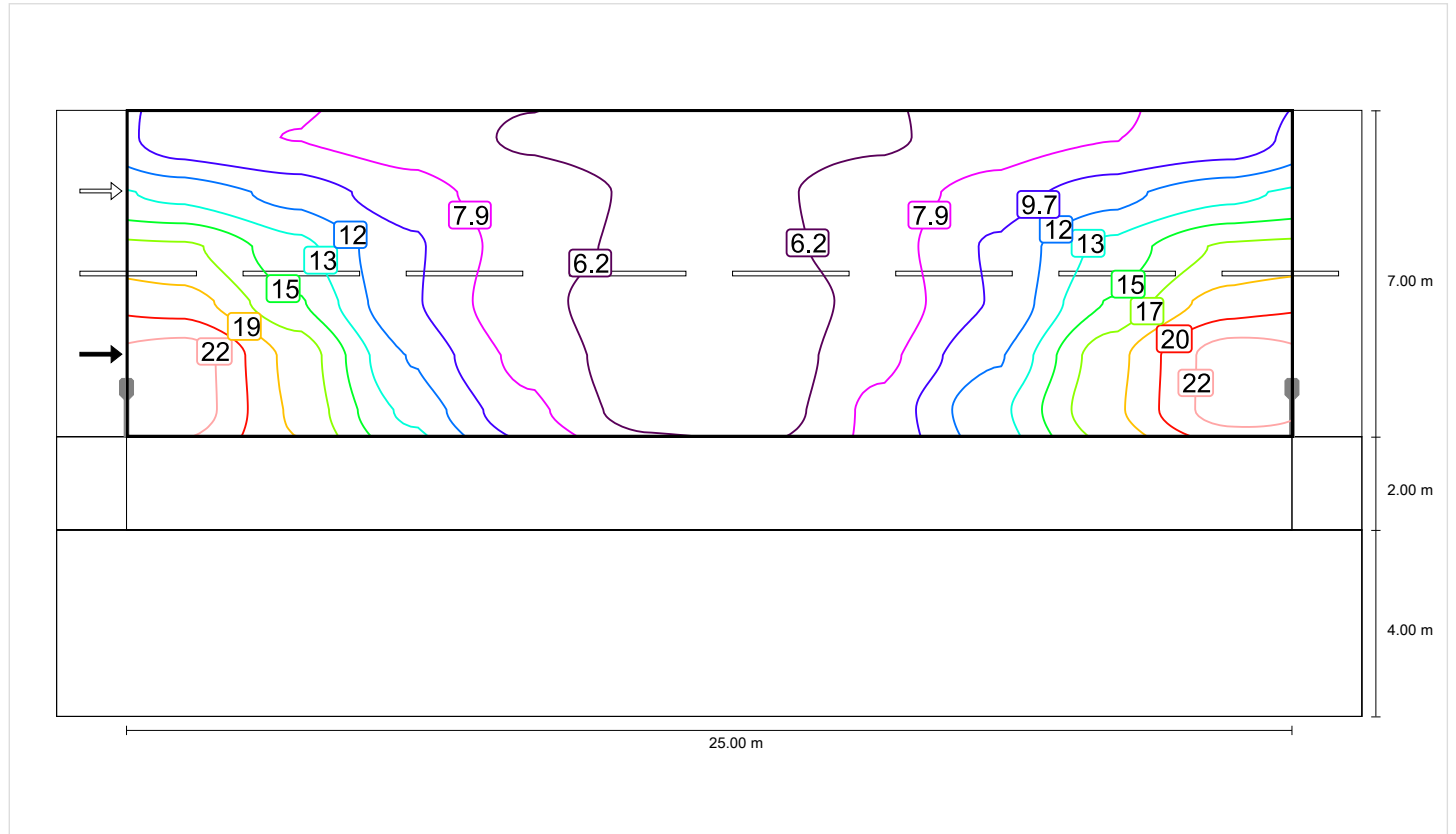
Lm [cd/m ²]	Lmin [cd/m ²]	Lmax [cd/m ²]	g1	g2
0.96	0.41	2.08	0.424	0.196

STREET (M5)

Light loss factor: 0.67
 Grid: 10 x 6 Points

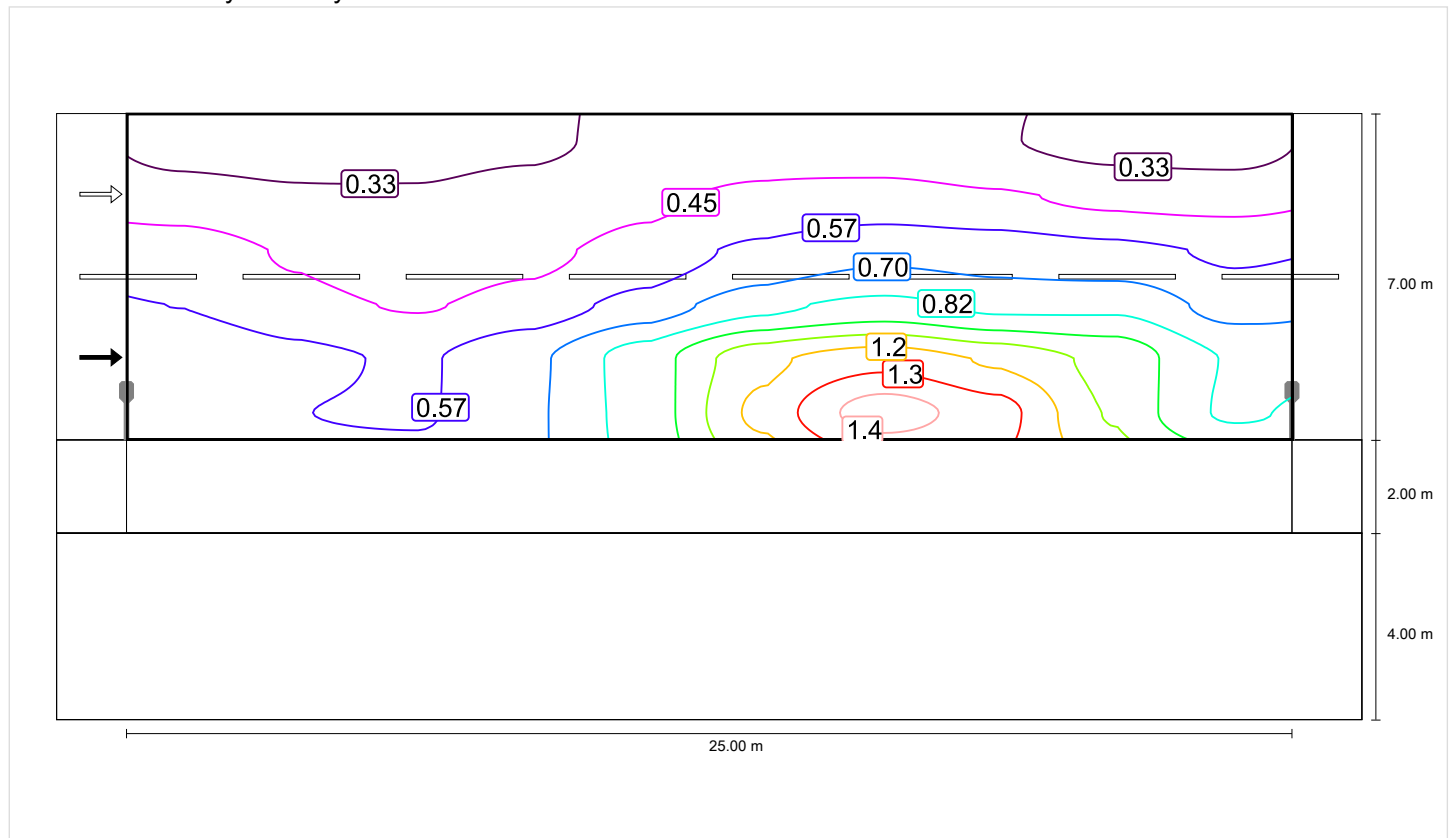
Lm [cd/m ²] ≥ 0.50	Uo ≥ 0.35	UI ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✓ 0.62	✓ 0.42	✓ 0.44	✓ 9	✓ 0.41

Horizontal illuminance

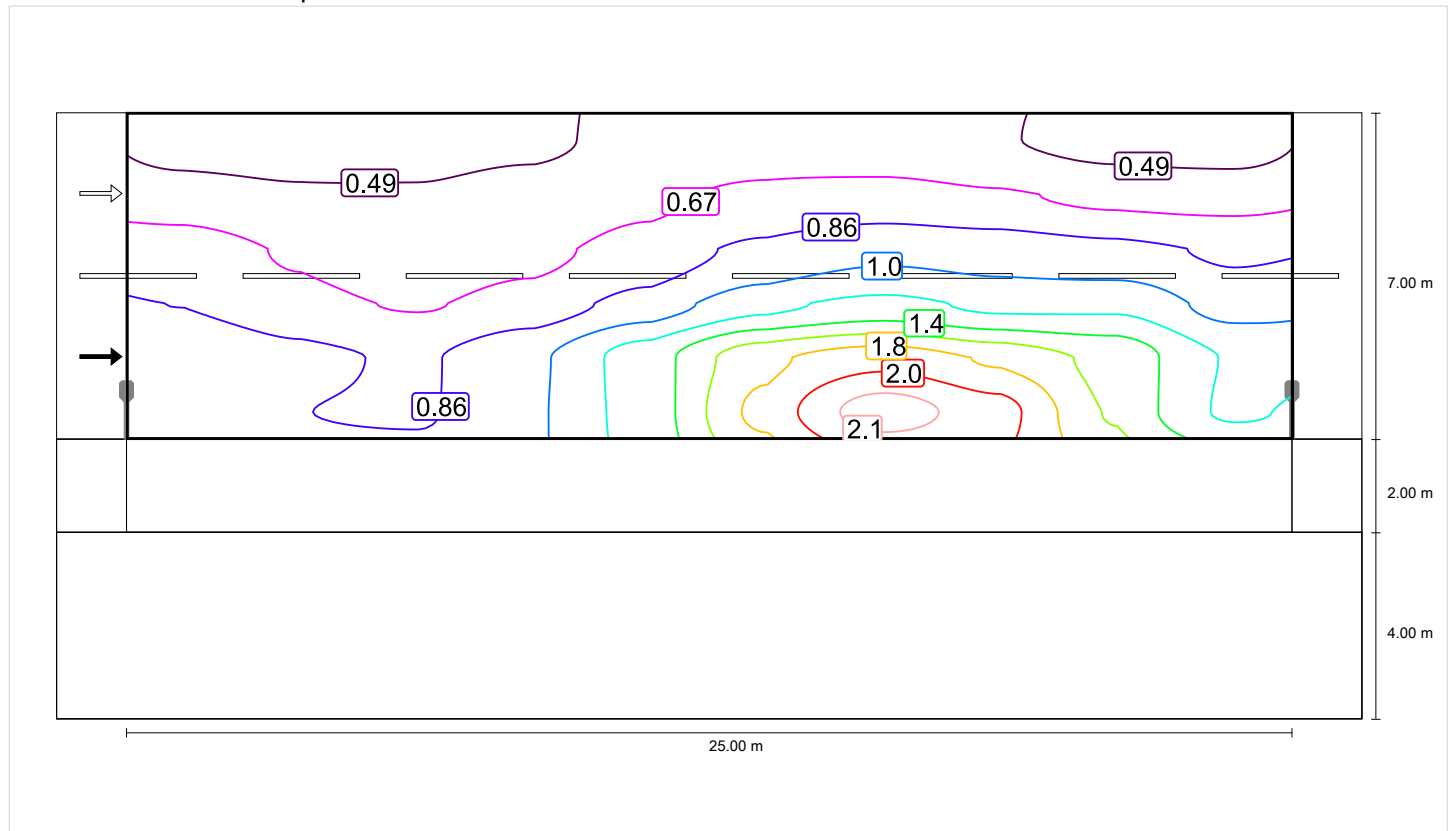


Observer 1

Luminance with dry roadway

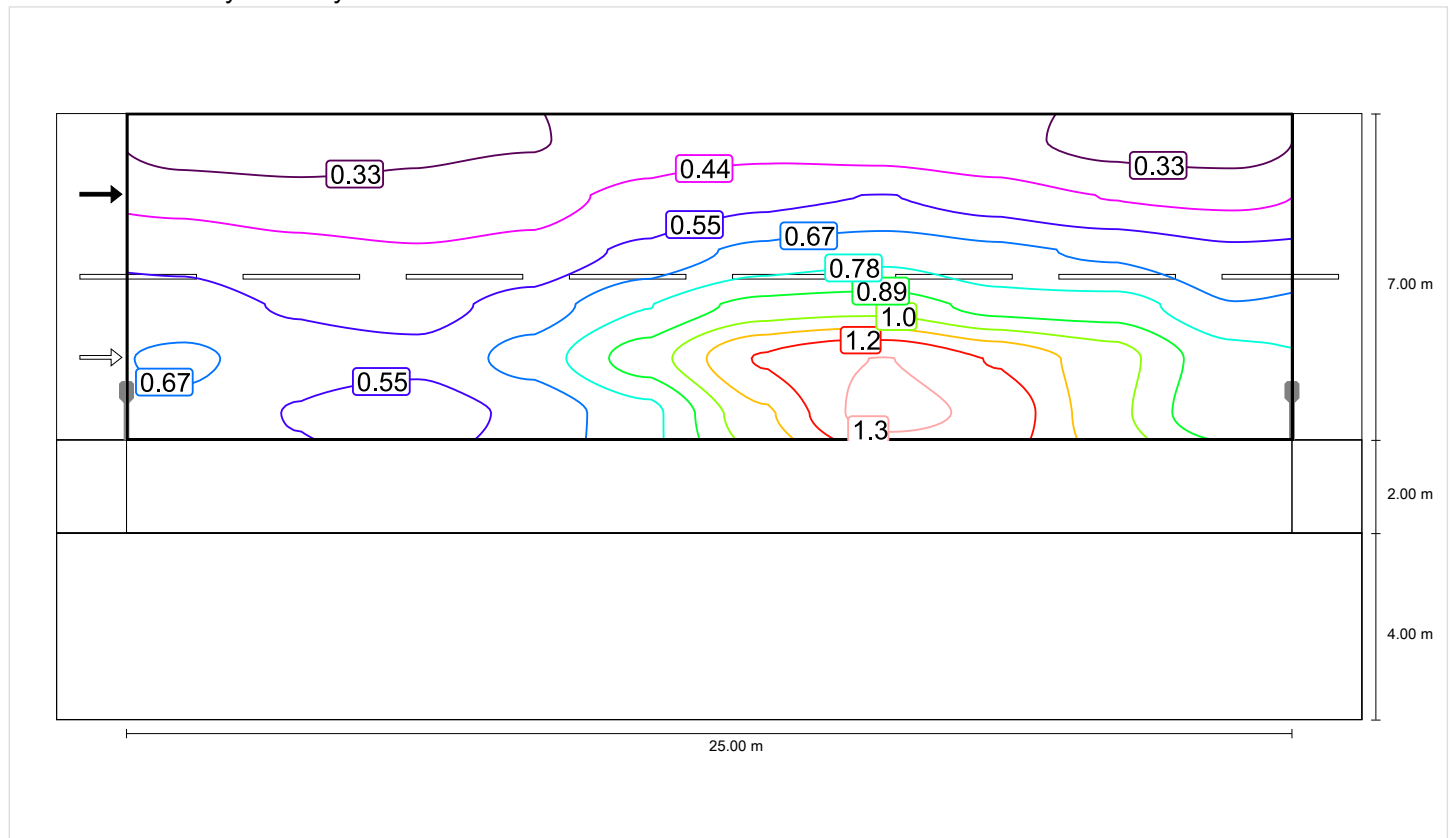


Luminance with new lamp

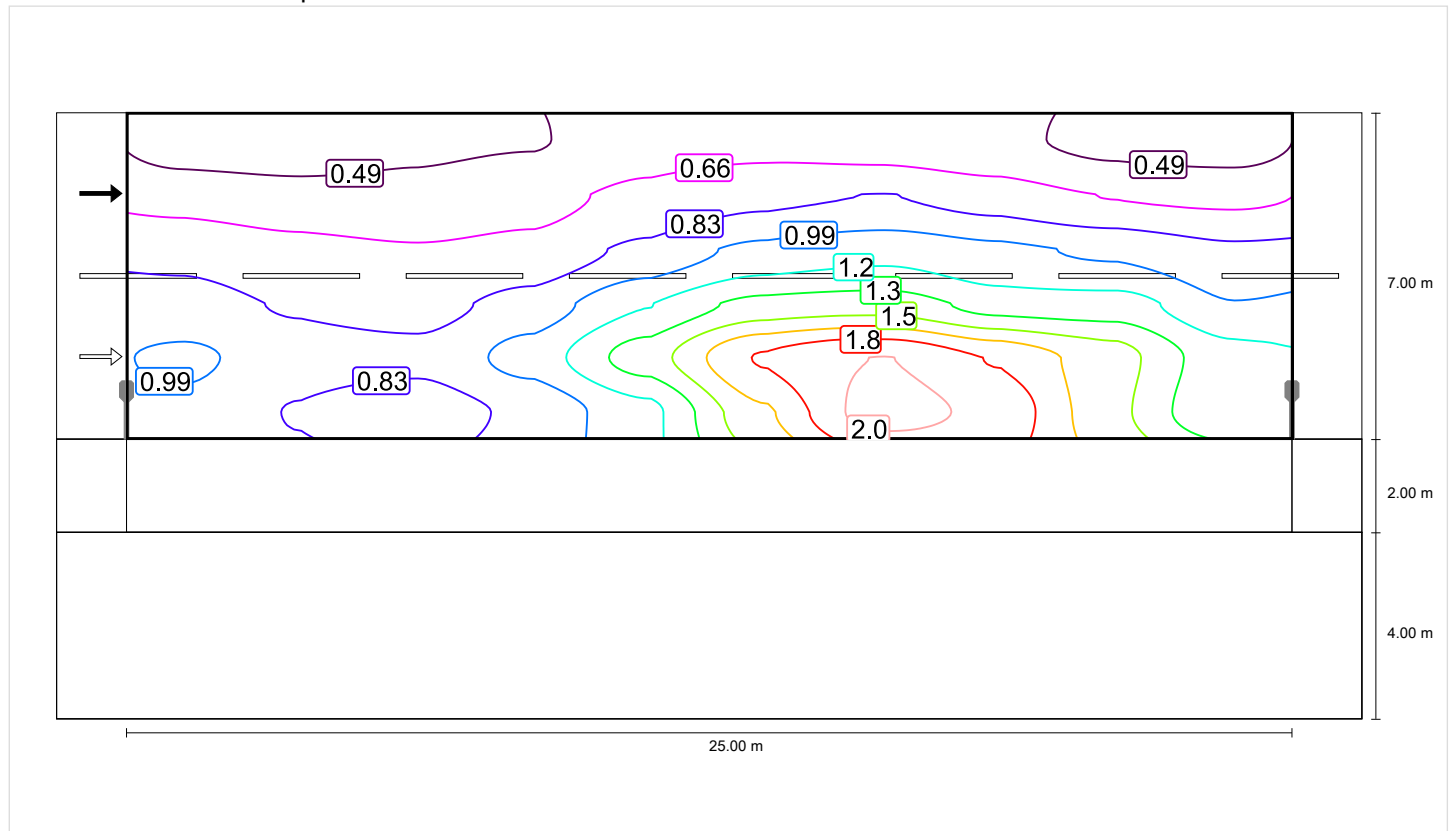


Observer 2

Luminance with dry roadway



Luminance with new lamp

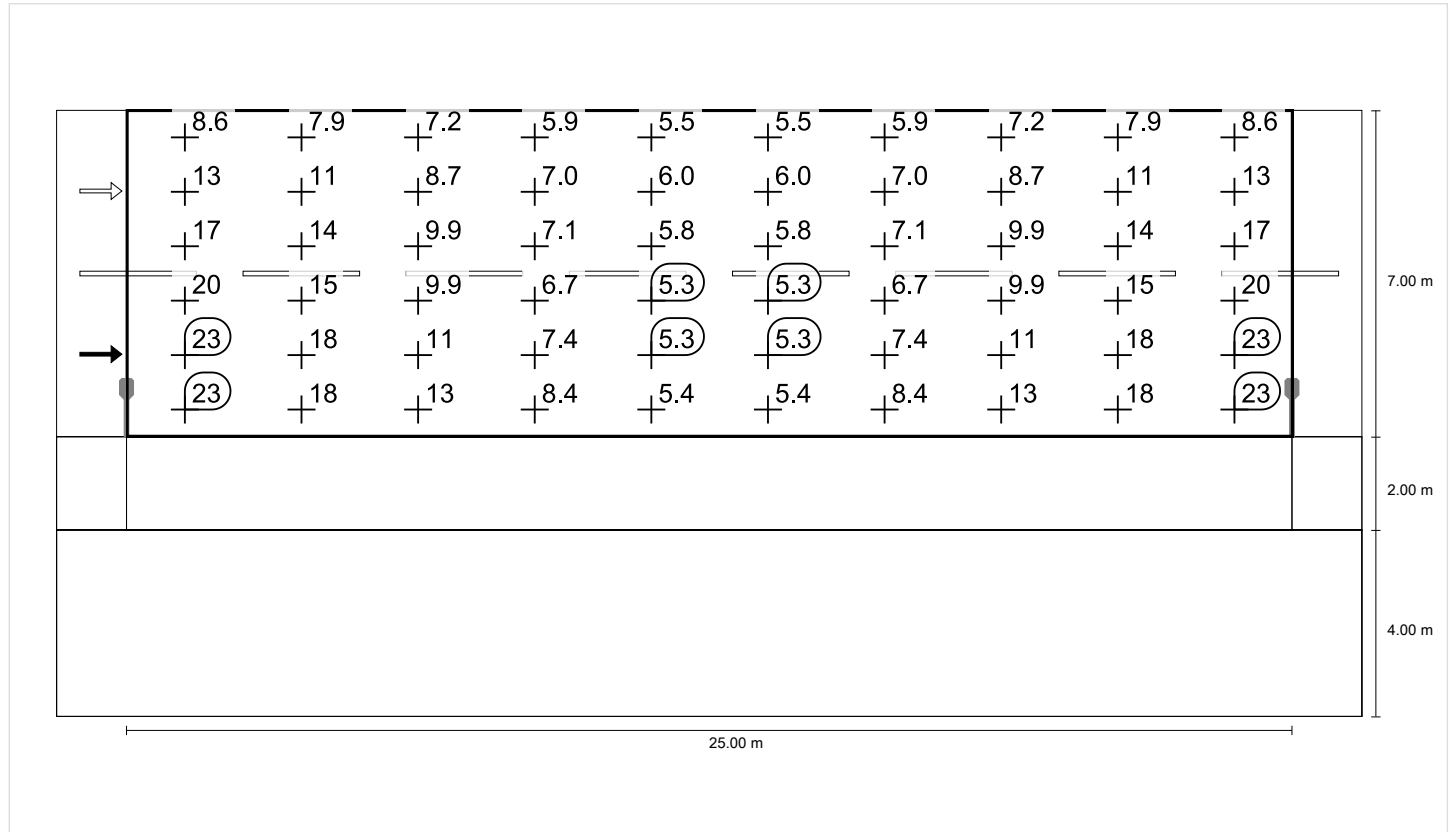


STREET (M5)

Light loss factor: 0.67
 Grid: 10 x 6 Points

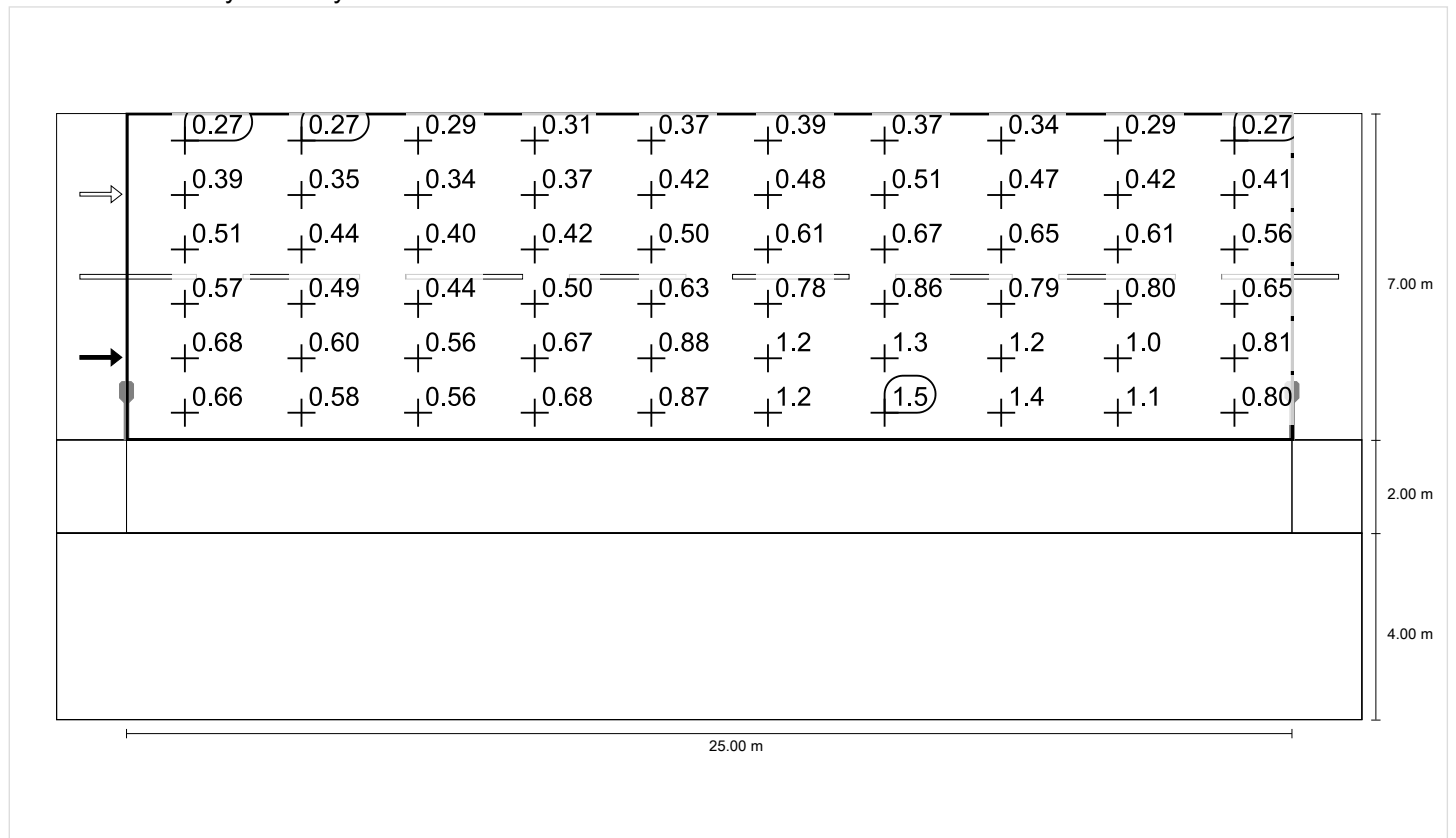
Lm [cd/m²] ≥ 0.50	Uo ≥ 0.35	UI ≥ 0.40	TI [%] ≤ 15	EIR ≥ 0.30
✓ 0.62	✓ 0.42	✓ 0.44	✓ 9	✓ 0.41

Horizontal illuminance

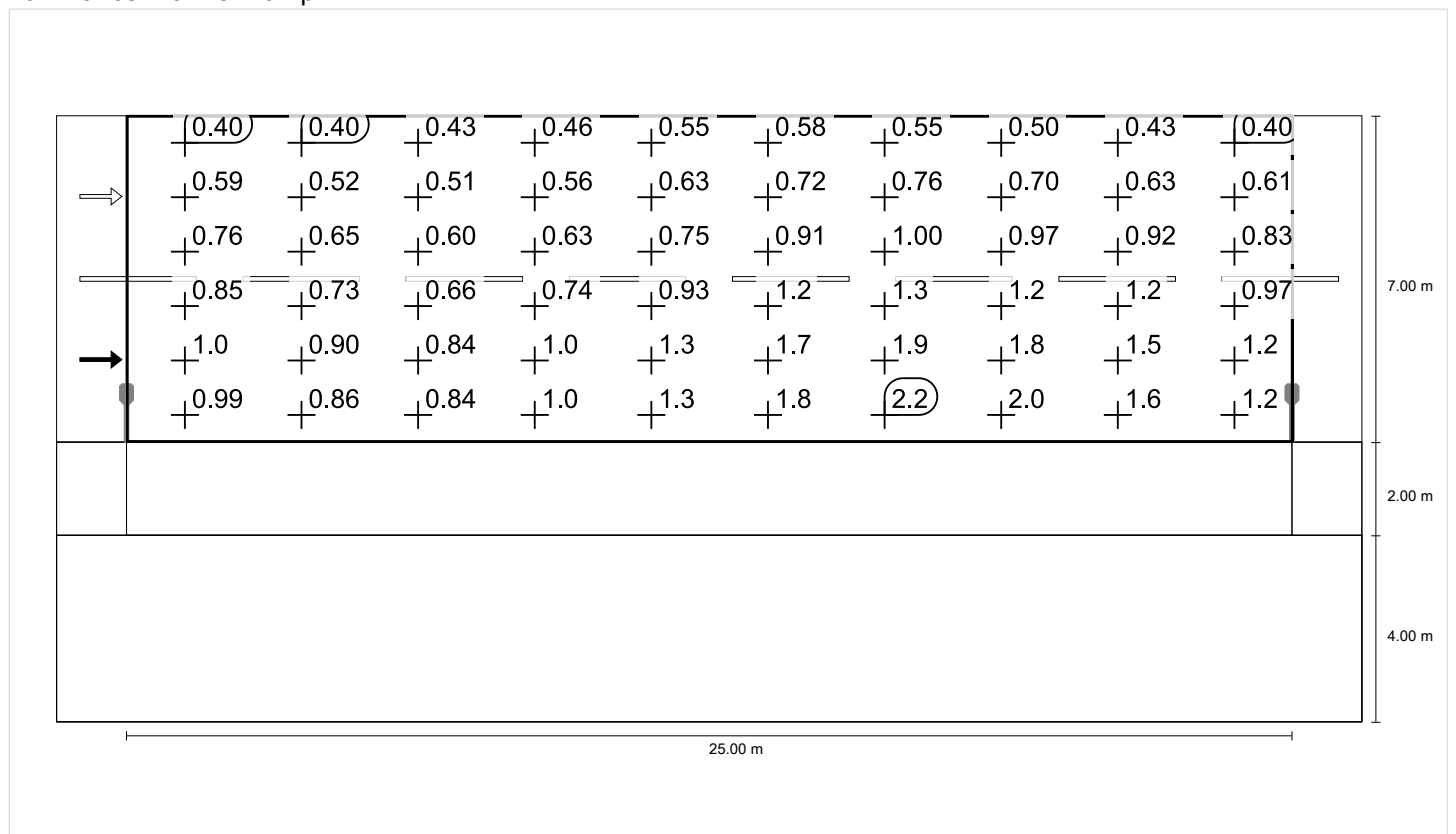


Observer 1

Luminance with dry roadway

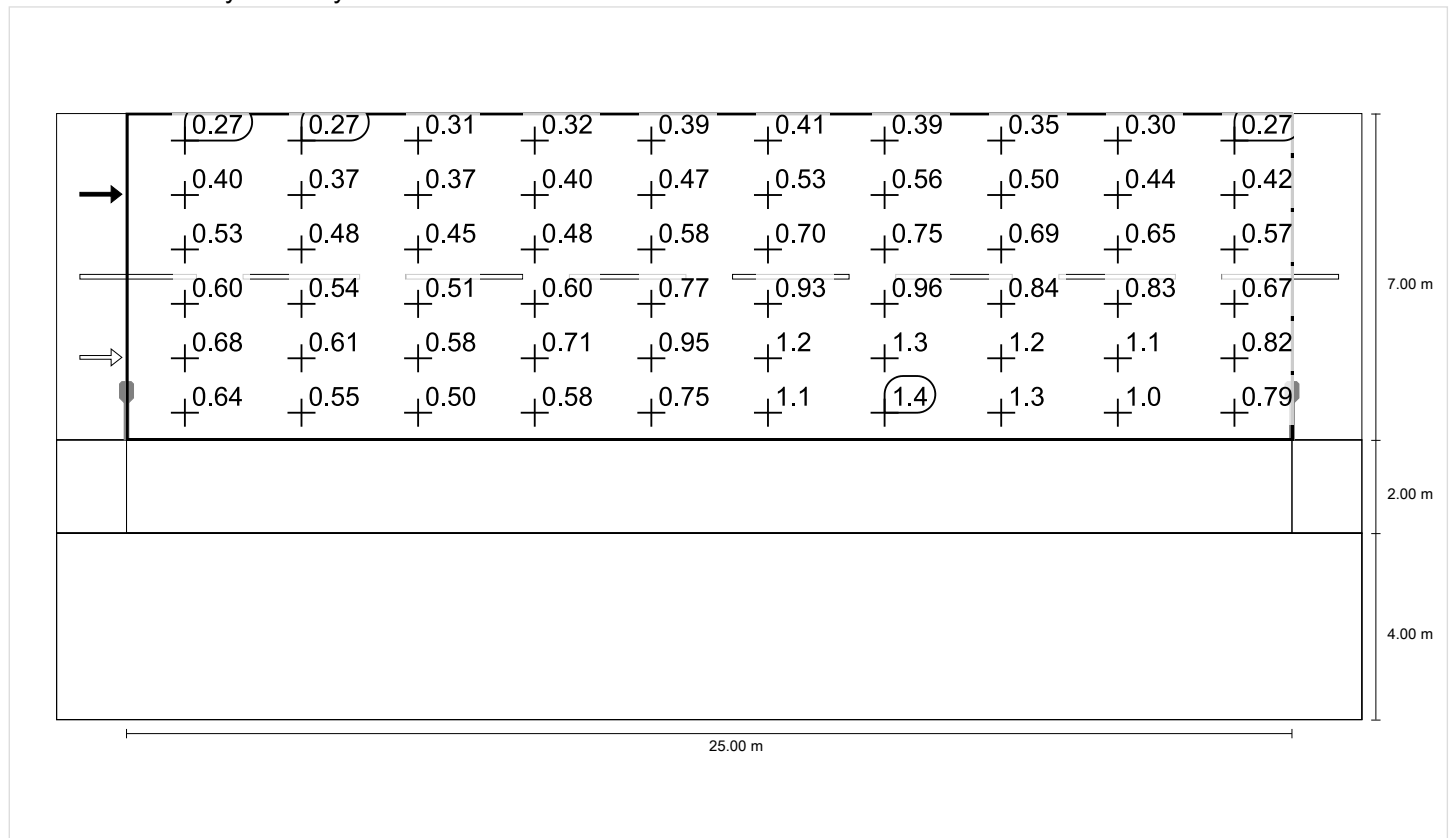


Luminance with new lamp

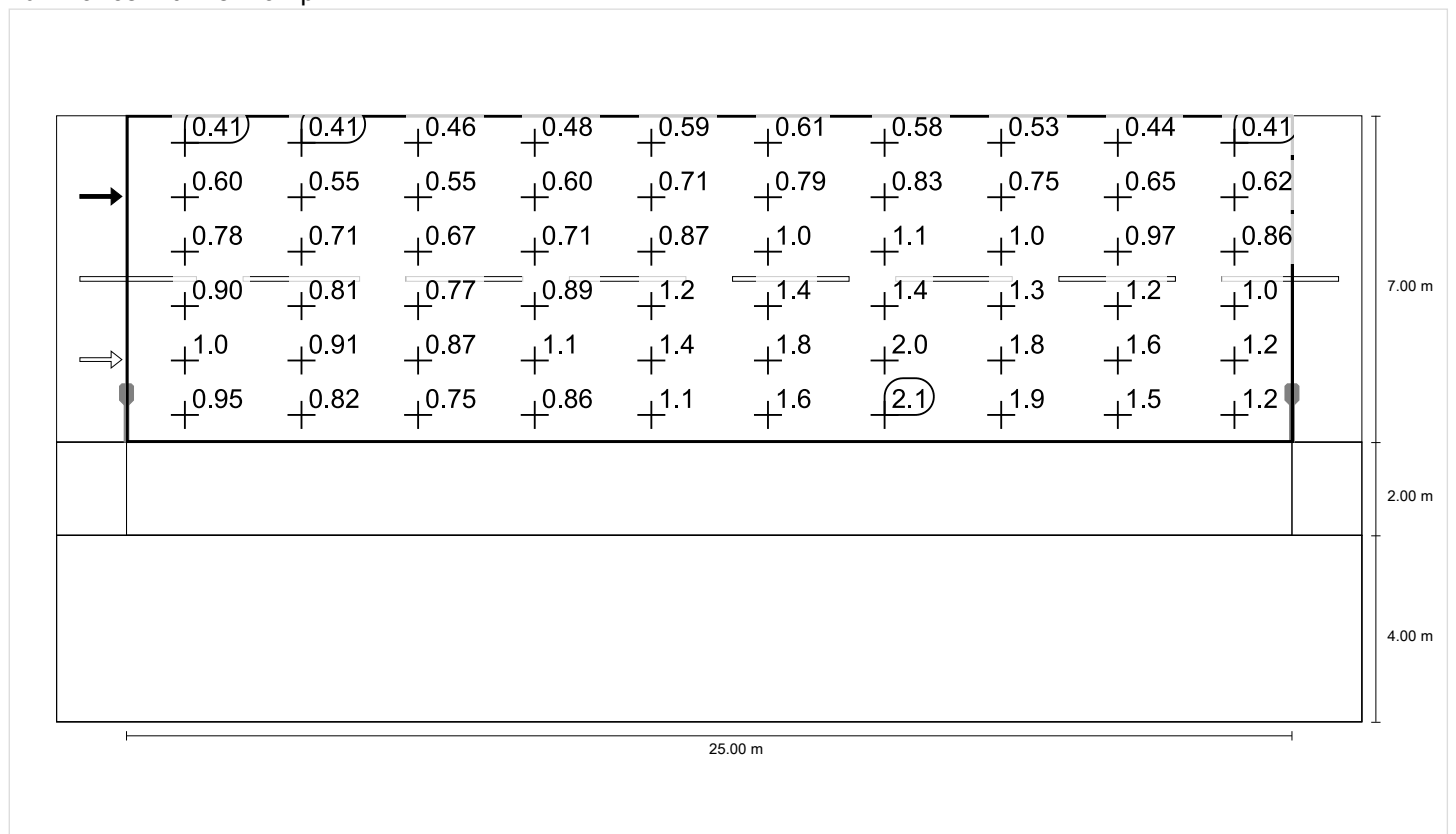


Observer 2

Luminance with dry roadway



Luminance with new lamp



SIDEWALK (P5)

Light loss factor: 0.67
Grid: 10 x 3 Points

Emin [lx] ≥ 0.60	Em [lx]
✓ 3.15	* 9.68

* Informative, not part of the valuation

SIDEWALK (P5)

Horizontal illuminance [lx]

5.667	19.2	16.5	12.0	7.99	5.02	5.02	7.99	12.0	16.5	19.2
5.000	14.3	13.5	10.7	6.41	4.24	4.24	6.41	10.7	13.5	14.3
4.333	9.57	9.84	8.10	4.69	3.15	3.15	4.69	8.10	9.84	9.57
m	1.250	3.750	6.250	8.750	11.250	13.750	16.250	18.750	21.250	23.750

Grid: 10 x 3 Points

Em [lx]	Emin [lx]	Emax [lx]	g1	g2
9.68	3.15	19.2	0.326	0.164

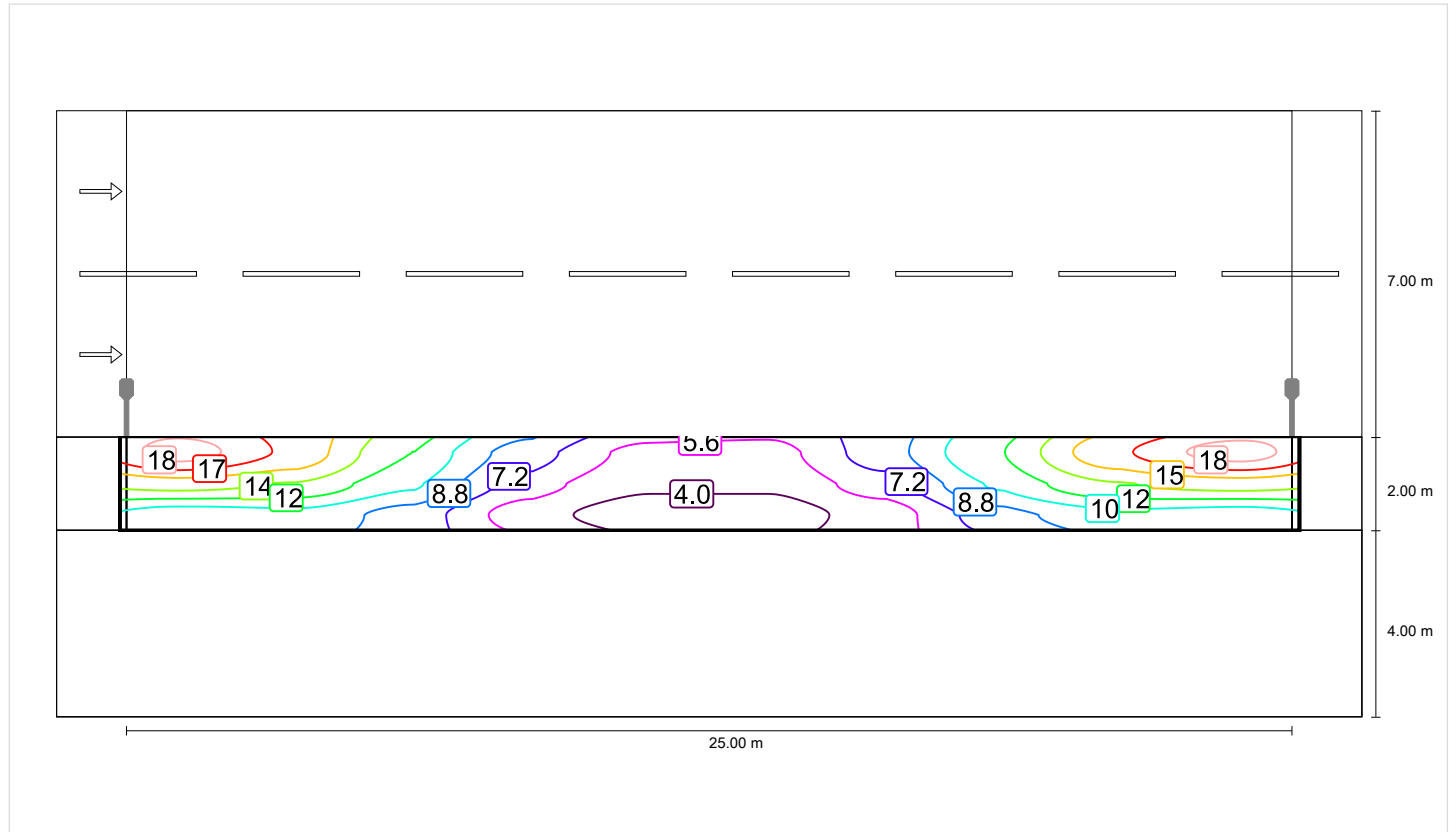
SIDEWALK (P5)

Light loss factor: 0.67
 Grid: 10 x 3 Points

Emin [lx] ≥ 0.60	Em [lx]
✓ 3.15	* 9.68

* Informative, not part of the valuation

Horizontal illuminance



SIDEWALK (P5)

Light loss factor: 0.67
 Grid: 10 x 3 Points

Emin [lx] ≥ 0.60	Em [lx]
✓ 3.15	* 9.68

* Informative, not part of the valuation

Horizontal illuminance

