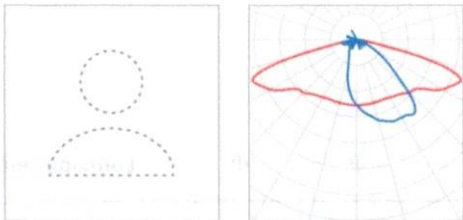


Site 1

Luminaire layout plan



Manufacturer	Noch kein DIALux Mitglied
Article name	
Fitting	1x

P	8.0 W
$\Phi_{\text{Luminaire}}$	1600 lm

Individual luminaires

X	Y	Mounting height	Luminaire
38.785 m	12.550 m	4.817 m	1
17.500 m	8.109 m	4.817 m	2

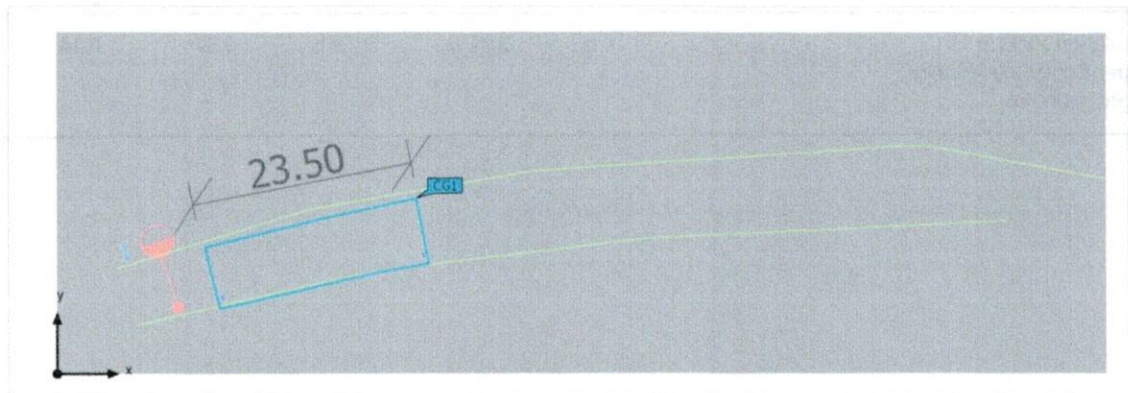
Site 1

Luminaire list

Φ_{total}	P_{total}	Luminous efficacy
3200 lm	16.0 W	200.0 lm/W

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
2	Noch kein DIALux Mitglied			8.0 W	1600 lm	200.0 lm/W

Site 1 (Light scene 1)

Calculation objects

Site 1 (Light scene 1)

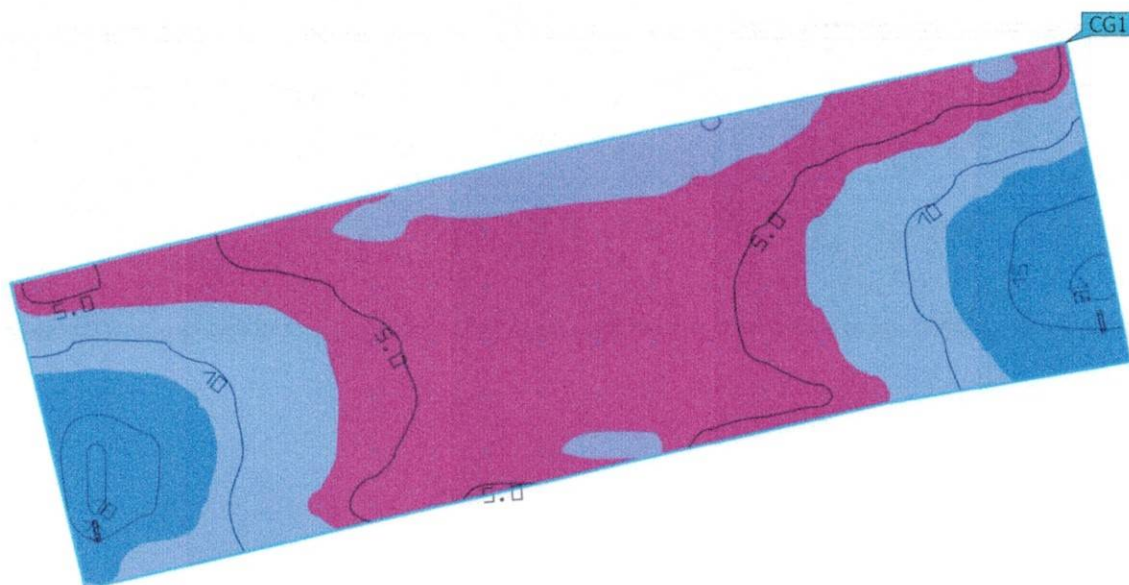
Calculation objects

Calculation surfaces

Properties	E	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Calculation surface 15 Perpendicular illuminance Height: 0.000 m	7.14 lx	2.46 lx	17.9 lx	0.34	0.14	CG1

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

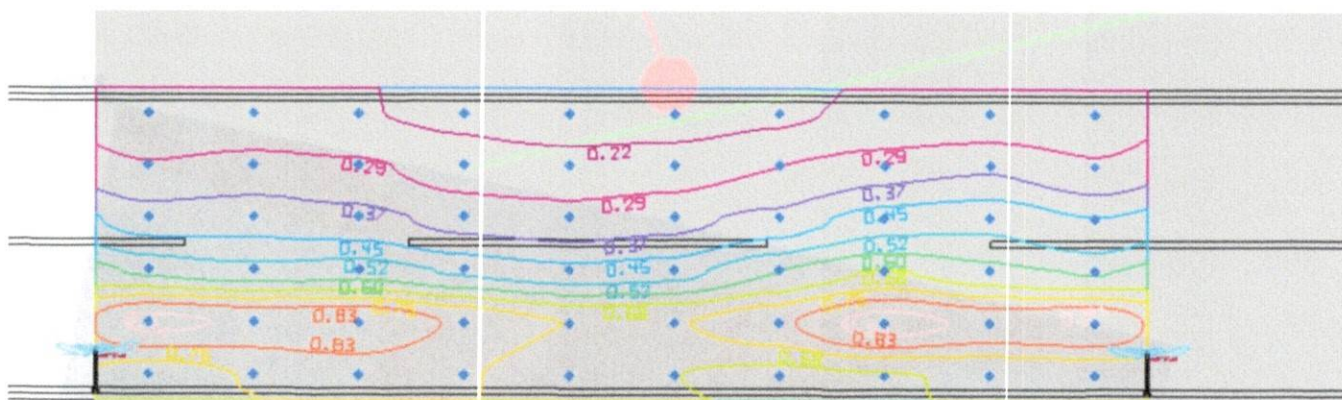
Site 1 (Light scene 1)

Calculation surface 15

Properties	\bar{E}	E_{\min}	E_{\max}	$U_0 (g_1)$	g_2	Index
Calculation surface 15 Perpendicular illuminance Height: 0.000 m	7.14 lx	2.46 lx	17.9 lx	0.34	0.14	CG1

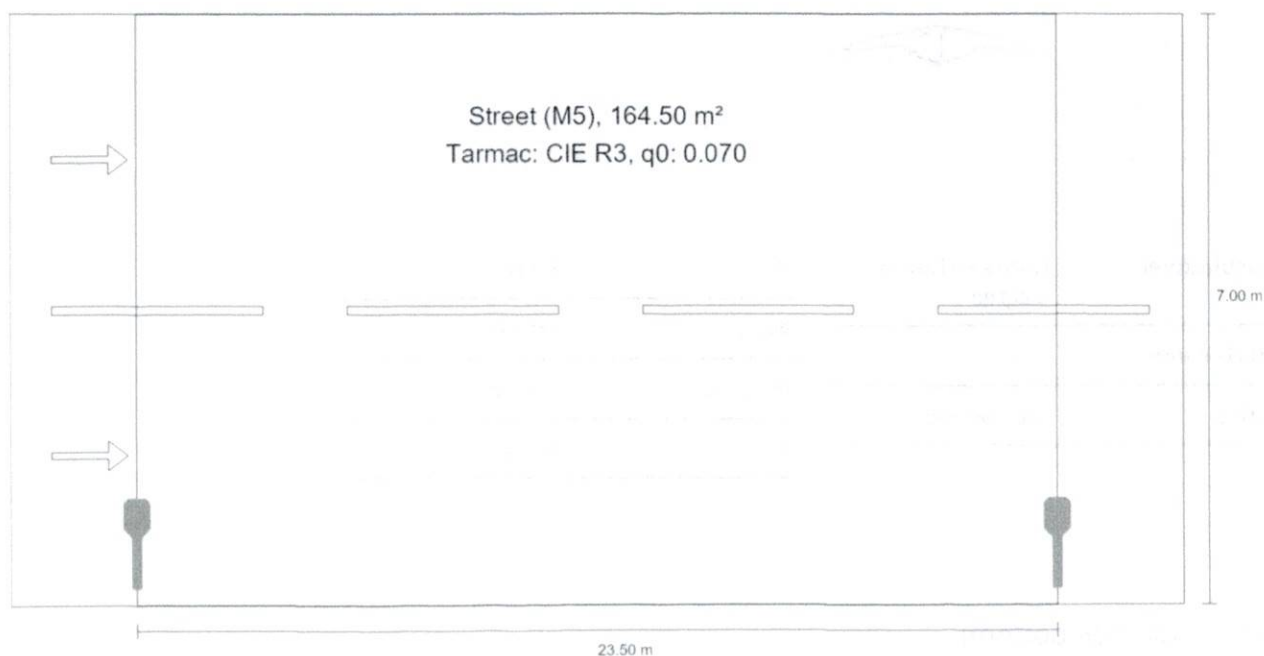
Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Images

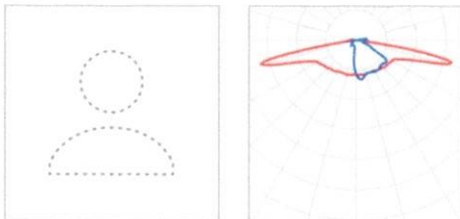


Straßenszene 3 (272)

Summary (according to EN 13201:2015)



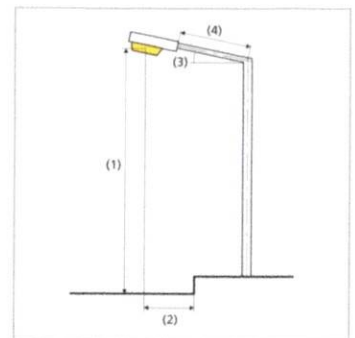
Summary (according to EN 13201:2015)



Manufacturer	Noch kein DIALux Mitglied	P	8.0 W
Article name		Φ_{Lamp}	1600 lm
Fitting	user-defined	$\Phi_{\text{Luminaire}}$	1600 lm
		η	100.00 %

T3-L (single side bottom)

Pole distance	23.500 m
(1) Light spot height	4.800 m
(2) Light point overhang	1.000 m
(3) Boom inclination	0.0°
(4) Boom length	0.800 m
Annual operating hours	4000 h: 100.0 %, 8.0 W
Wattage / route	344.0 W/km
ULR / ULOR	0.01 / 0.01
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	$\geq 70^\circ$: 926 cd/klm $\geq 80^\circ$: 869 cd/klm $\geq 90^\circ$: 59.3 cd/klm
Luminous intensity class The luminous intensity values in [cd/klm] for calculation of the luminous intensity class refer to the luminaire luminous flux according to EN 13201:2015.	–
Glare index class	D.0
MF	0.90



Summary (according to EN 13201:2015)

Results for valuation fields

A maintenance factor of 0.90 was used for calculating for the installation.

	Symbol	Calculated	Target	Check
Street (M5)	L_{av}	0.51 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.35	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	$TI^{(1)}$	36 %	-	
	$REI^{(1)}$	0.21	-	

(1) Informative, not part of the valuation

Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
MUSTER	D_p	0.008 W/lx*m ²	-
T3-L (single side bottom)	D_e	0.2 kWh/m ² yr	32.0 kWh/yr

Street (M5)

Results for valuation field

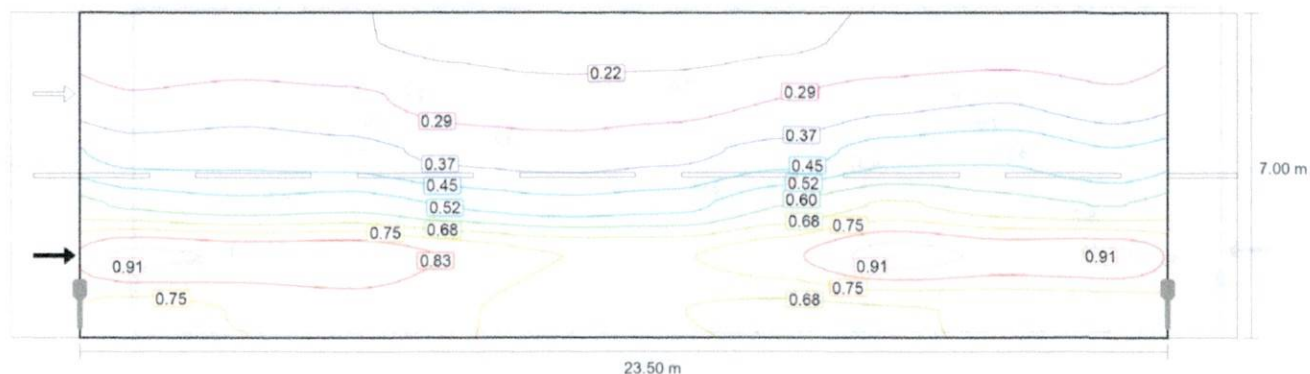
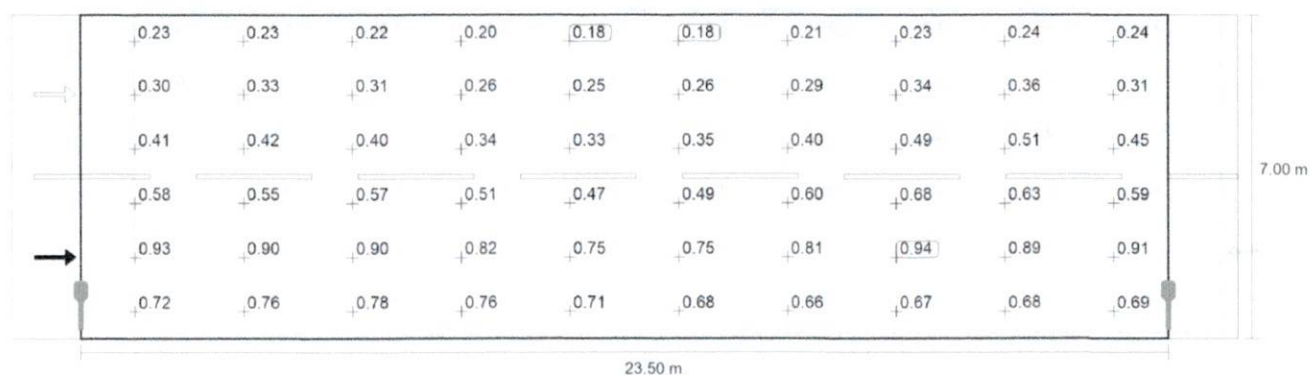
	Symbol	Calculated	Target	Check
Street (M5)	L_{av}	0.51 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.35	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	$TI^{(1)}$	36 %	–	
	$R_{EI}^{(1)}$	0.21	–	

Results for observer

	Symbol	Calculated	Target	Check
Observer 1 Position: -60.000 m, 1.750 m, 1.500 m	L_{av}	0.51 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.35	≥ 0.35	✓
	U_l	0.79	≥ 0.40	✓
	$TI^{(1)}$	36 %	–	
Observer 2 Position: -60.000 m, 5.250 m, 1.500 m	L_{av}	0.55 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.36	≥ 0.35	✓
	U_l	0.72	≥ 0.40	✓
	$TI^{(1)}$	18 %	–	

(1) Informative, not part of the valuation

Street (M5)

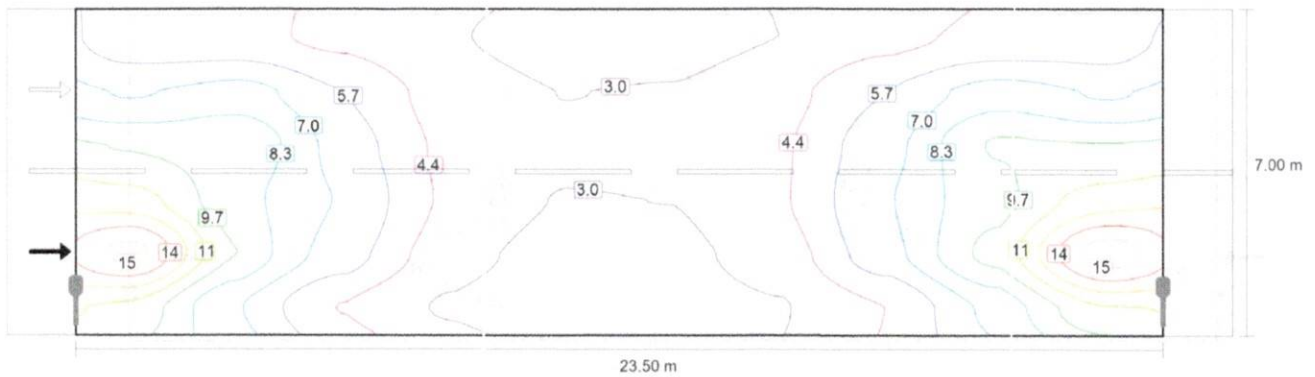
Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Iso-illuminance curves)Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Value grid)

m	1.175	3.525	5.875	8.225	10.575	12.925	15.275	17.625	19.975	22.325
6.417	0.23	0.23	0.22	0.20	0.18	0.18	0.21	0.23	0.24	0.24
5.250	0.30	0.33	0.31	0.26	0.25	0.26	0.29	0.34	0.36	0.31
4.083	0.41	0.42	0.40	0.34	0.33	0.35	0.40	0.49	0.51	0.45
2.917	0.58	0.55	0.57	0.51	0.47	0.49	0.60	0.68	0.63	0.59
1.750	0.93	0.90	0.90	0.82	0.75	0.75	0.81	0.94	0.89	0.91
0.583	0.72	0.76	0.78	0.76	0.71	0.68	0.66	0.67	0.68	0.69

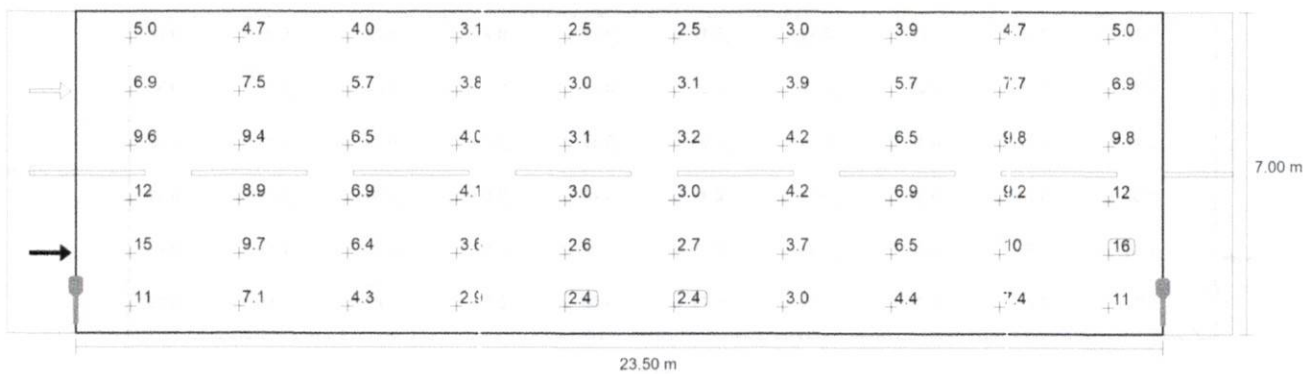
Observer 1: Maintenance value, luminance with dry roadway [cd/m^2] (Value chart)

	L_{av}	L_{min}	L_{max}	$U_o (g_1)$	g_2
Observer 1: Maintenance value, luminance with dry roadway	0.51 cd/m^2	0.18 cd/m^2	0.94 cd/m^2	0.35	0.19

Street (M5)



Maintenance value, horizontal illuminance [lx] (Iso-illuminance curves)



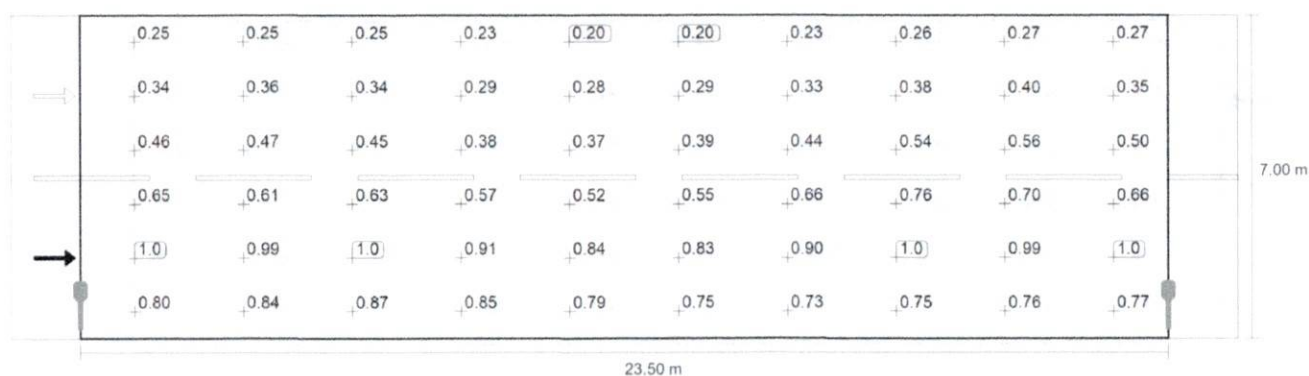
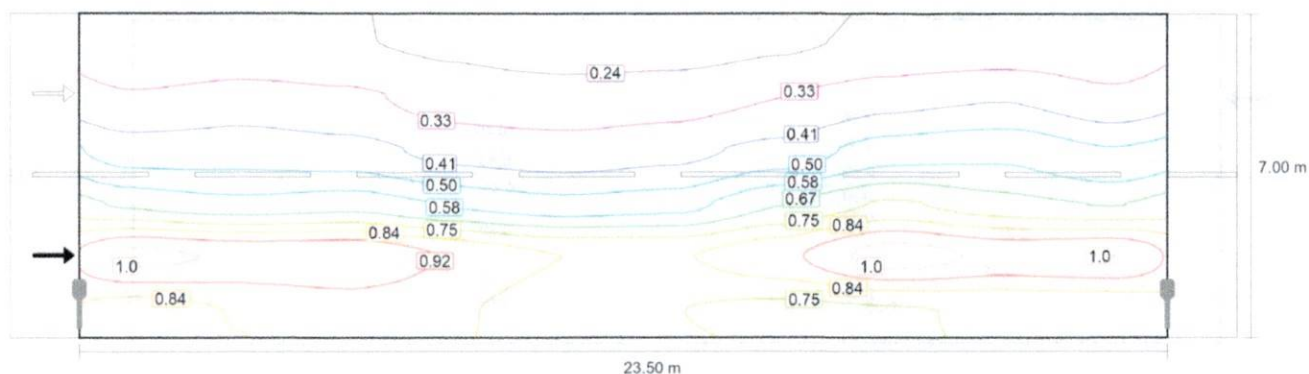
Maintenance value, horizontal illuminance [lx] (Value grid)

m	1.175	3.525	5.875	8.225	10.575	12.925	15.275	17.625	19.975	22.325
6.417	5.03	4.75	4.03	3.14	2.53	2.54	3.33	3.93	4.71	5.02
5.250	6.91	7.55	5.68	3.77	3.02	3.09	3.87	5.71	7.65	6.87
4.083	9.61	9.36	6.55	4.04	3.14	3.21	4.19	6.54	9.80	9.78
2.917	11.66	8.94	6.94	4.09	2.99	3.04	4.22	6.93	9.19	11.81
1.750	15.38	9.66	6.41	3.56	2.63	2.69	3.66	6.51	10.10	15.65
0.583	10.68	7.14	4.29	2.89	2.37	2.40	2.95	4.37	7.36	10.85

Maintenance value, horizontal illuminance [lx] (Value chart)

	E_{av}	E_{min}	E_{max}	$U_o (g_1)$	g_2
Maintenance value, horizontal illuminance	6.01 lx	2.37 lx	15.6 lx	0.39	0.15

Street (M5)



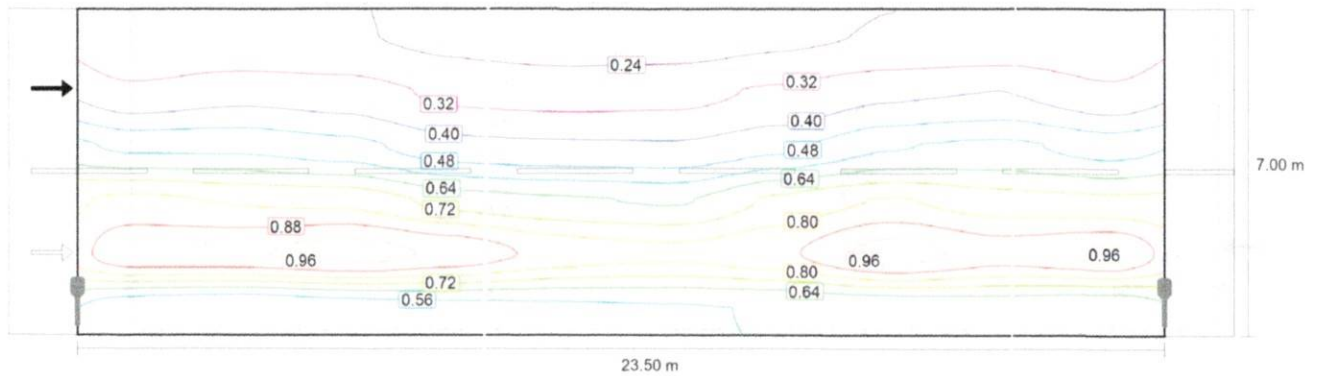
Observer 1: Luminance with new installation [cd/m²] (Value grid)

m	1.175	3.525	5.875	8.225	10.575	12.925	15.275	17.625	19.975	22.325
6.417	0.25	0.25	0.25	0.23	0.20	0.20	0.23	0.26	0.27	0.27
5.250	0.34	0.36	0.34	0.29	0.28	0.29	0.33	0.38	0.40	0.35
4.083	0.46	0.47	0.45	0.38	0.37	0.39	0.44	0.54	0.56	0.50
2.917	0.65	0.61	0.63	0.57	0.52	0.55	0.66	0.76	0.70	0.66
1.750	1.03	0.99	1.00	0.91	0.84	0.83	0.90	1.05	0.99	1.01
0.583	0.80	0.84	0.87	0.85	0.79	0.75	0.73	0.75	0.76	0.77

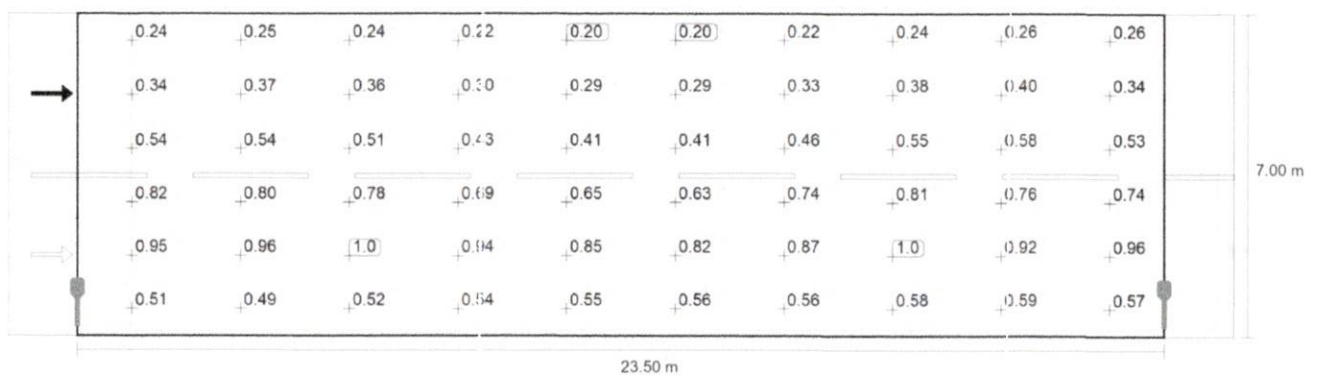
Observer 1: Luminance with new installation [cd/m²] (Value chart)

	L_{av}	L_{min}	L_{max}	$U_o (g_1)$	g_2
Observer 1: Luminance with new installation	0.57 cd/m²	0.20 cd/m²	1.05 cd/m²	0.35	0.19

Street (M5)



Observer 2: Maintenance value, luminance with dry roadway [cd/m^2] (Iso-illuminance curves)



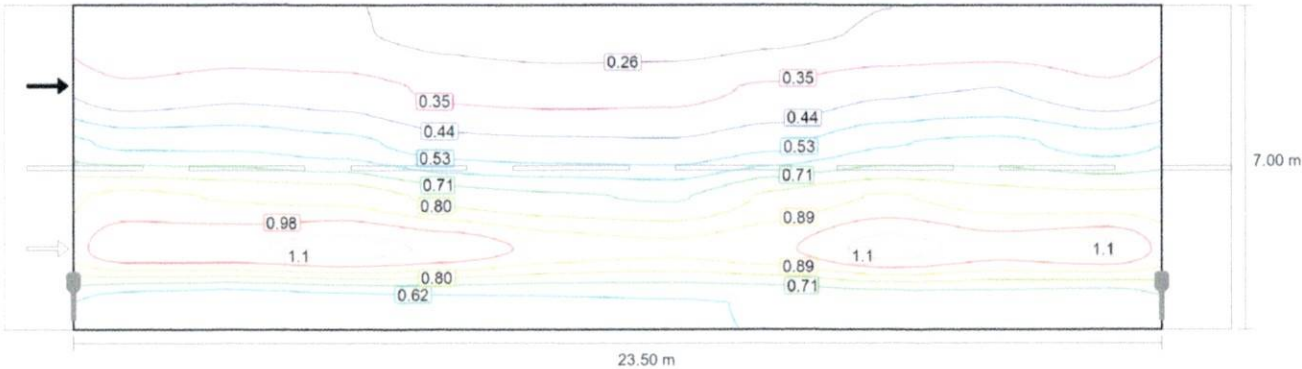
Observer 2: Maintenance value, luminance with dry roadway [cd/m^2] (Value grid)

m	1.175	3.525	5.875	8.225	10.575	12.925	15.275	17.625	19.975	22.325
6.417	0.24	0.25	0.24	0.22	0.20	0.20	0.22	0.24	0.26	0.26
5.250	0.34	0.37	0.36	0.30	0.29	0.29	0.33	0.38	0.40	0.34
4.083	0.54	0.54	0.51	0.43	0.41	0.41	0.46	0.55	0.58	0.53
2.917	0.82	0.80	0.78	0.69	0.65	0.63	0.74	0.81	0.76	0.74
1.750	0.95	0.96	1.00	0.94	0.85	0.82	0.87	1.00	0.92	0.96
0.583	0.51	0.49	0.52	0.54	0.55	0.56	0.56	0.58	0.59	0.57

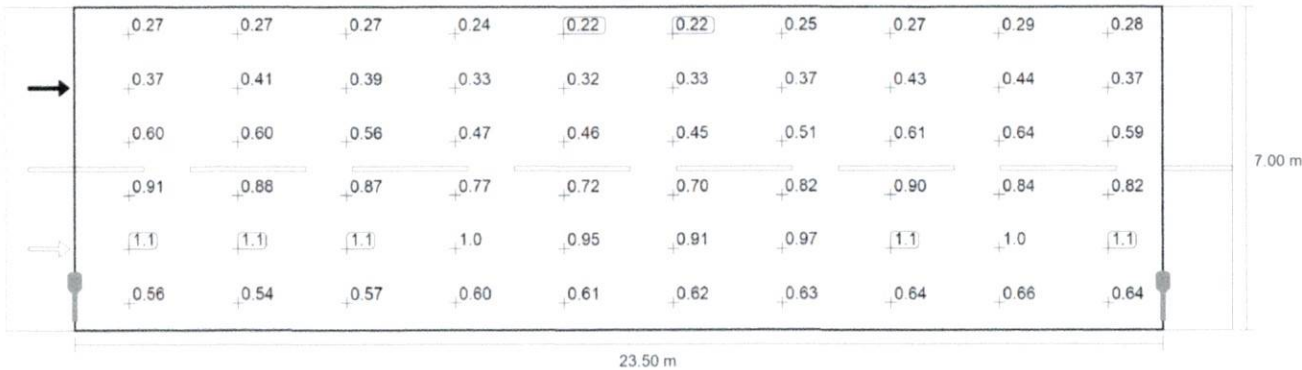
Observer 2: Maintenance value, luminance with dry roadway [cd/m^2] (Value chart)

	L_{av}	L_{min}	L_{max}	$U_o (g_1)$	g_2
Observer 2: Maintenance value, luminance with dry roadway	0.55 cd/m^2	0.20 cd/m^2	1.00 cd/m^2	0.36	0.20

Street (M5)



Observer 2: Luminance with new installation [cd/m²] (Iso-illuminance curves)



Observer 2: Luminance with new installation [cd/m²] (Value grid)

m	1.175	3.525	5.875	8.225	10.575	12.925	15.275	17.625	19.975	22.325
6.417	0.27	0.27	0.27	0.24	0.22	0.22	0.25	0.27	0.29	0.28
5.250	0.37	0.41	0.39	0.33	0.32	0.33	0.37	0.43	0.44	0.37
4.083	0.60	0.60	0.56	0.47	0.46	0.45	0.51	0.61	0.64	0.59
2.917	0.91	0.88	0.87	0.77	0.72	0.70	0.82	0.90	0.84	0.82
1.750	1.06	1.06	1.12	1.05	0.95	0.91	0.97	1.11	1.03	1.07
0.583	0.56	0.54	0.57	0.60	0.61	0.62	0.63	0.64	0.66	0.64

Observer 2: Luminance with new installation [cd/m²] (Value chart)

	L _{av}	L _{min}	L _{max}	U _o (g ₁)	g ₂
Observer 2: Luminance with new installation	0.61 cd/m²	0.22 cd/m²	1.12 cd/m²	0.36	0.20

