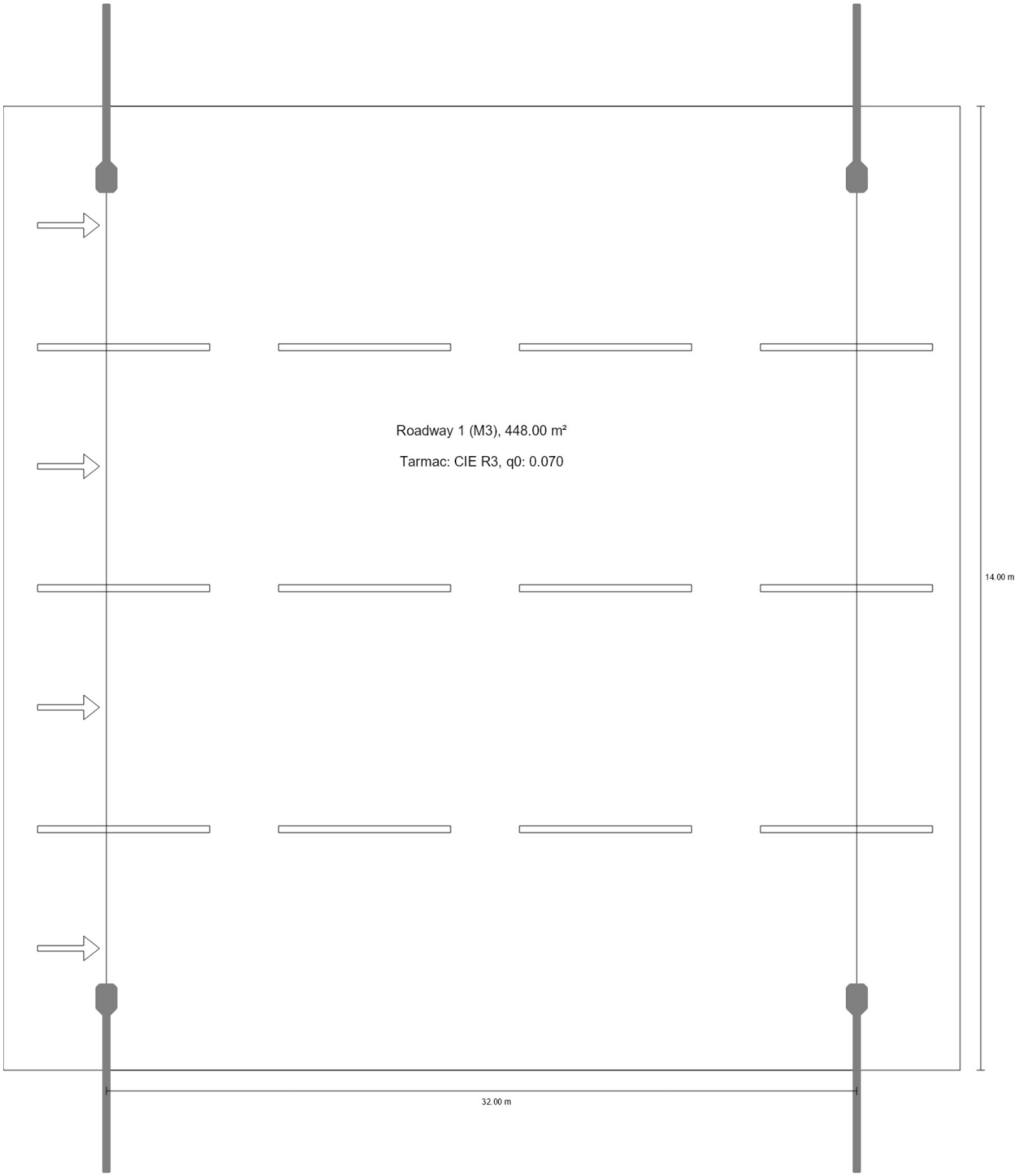
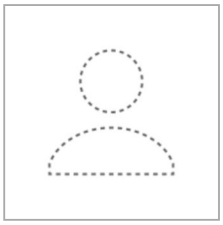
Street 1

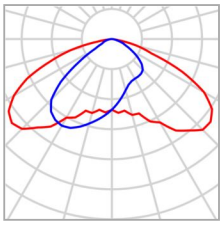
Summary (according to EN 13201:2015)



Street 1

Summary (according to EN 13201:2015)

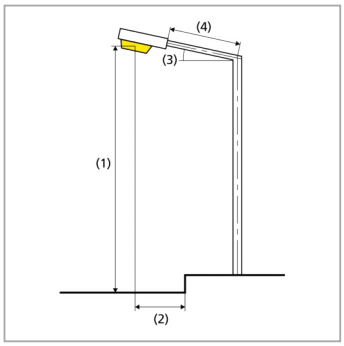




Manufacturer	Not yet a DIALux member
Fitting	user-defined

P	60.0 W
Φ_{Lamp}	12000 lm
$\Phi_{Luminaire}$	12011 lm
η	100.09 %

SL-HBST70W (both sides opposite)



Pole distance	32.000 m
(1) Light spot height	7.500 m
(2) Light point overhang	1.000 m
(3) Boom inclination	10.0°
(4) Boom length	2.500 m
Annual operating hours	4000 h: 100.0 %, 60.0 W
Wattage / route	3720.0 W/km
ULR / ULOR	0.00 / 0.00
Max. luminous intensities Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.	≥ 70°: 224 cd/klm ≥ 80°: 59.1 cd/klm ≥ 90°: 16.0 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.	G*3
Glare index class	D.5
MF	0.70

Street 1

Summary (according to EN 13201:2015)

Results for valuation fields

A maintenance factor of 0.70 was used for calculating for the installation.

	Symbol	Calculated	Target	Check
Roadway 1 (M3)	L_{av}	1.21 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.48	≥ 0.40	✓
	U_l	0.42	≥ 0.60	✗
	TI	9 %	≤ 15 %	✓
	R_{EI}	0.93	≥ 0.30	✓

Results for energy efficiency indicators

	Symbol	Calculated	Energy Consumption
Street 1	D_p	0.013 W/lx*m²	–
SL-HBST70W (both sides opposite)	D_e	1.1 kWh/m² yr	480.0 kWh/yr

Street 1

Roadway 1 (M3)

Results for valuation field

	Symbol	Calculated	Target	Check
Roadway 1 (M3)	L_{av}	1.21 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.48	≥ 0.40	✓
	U_l	0.42	≥ 0.60	✗
	TI	9 %	≤ 15 %	✓
	R_{EI}	0.93	≥ 0.30	✓

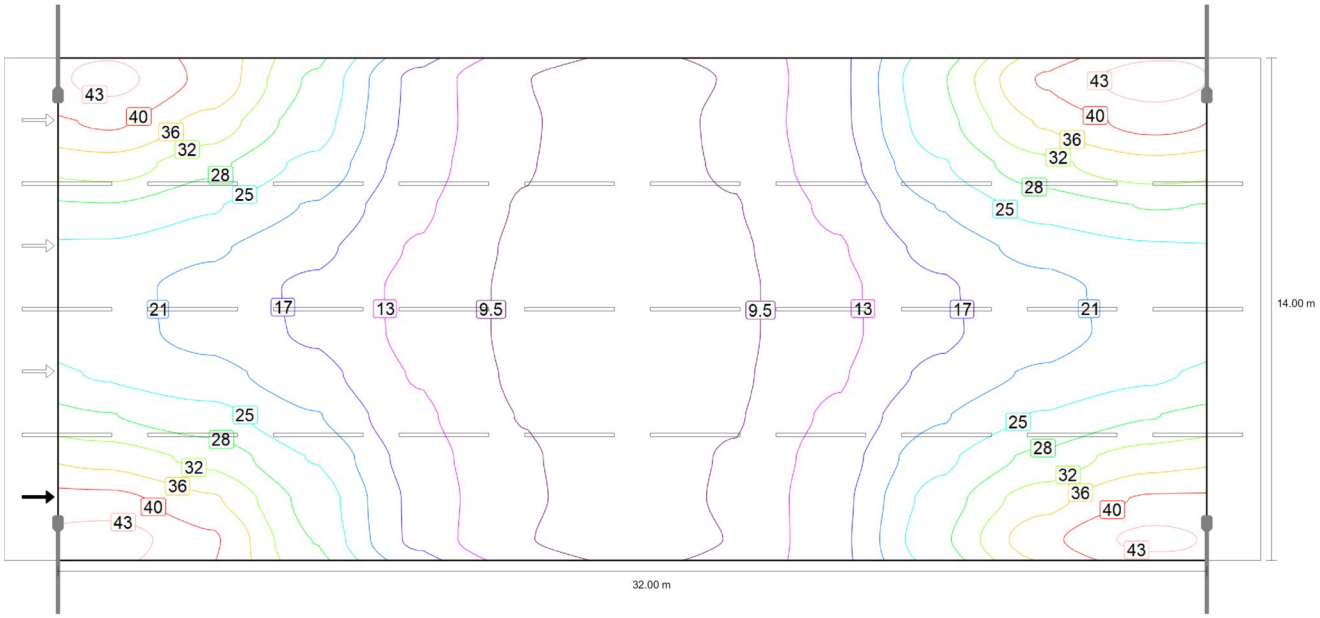
Results for observer

	Symbol	Calculated	Target	Check
Observer 1 Position: -60.000 m, 1.750 m, 1.500 m	L_{av}	1.21 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.49	≥ 0.40	✓
	U_l	0.53	≥ 0.60	✗
	TI	9 %	≤ 15 %	✓
Observer 2 Position: -60.000 m, 5.250 m, 1.500 m	L_{av}	1.23 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.49	≥ 0.40	✓
	U_l	0.63	≥ 0.60	✓
	TI	6 %	≤ 15 %	✓
Observer 3 Position: -60.000 m, 8.750 m, 1.500 m	L_{av}	1.23 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.48	≥ 0.40	✓
	U_l	0.59	≥ 0.60	✗
	TI	5 %	≤ 15 %	✓

Street 1

Roadway 1 (M3)

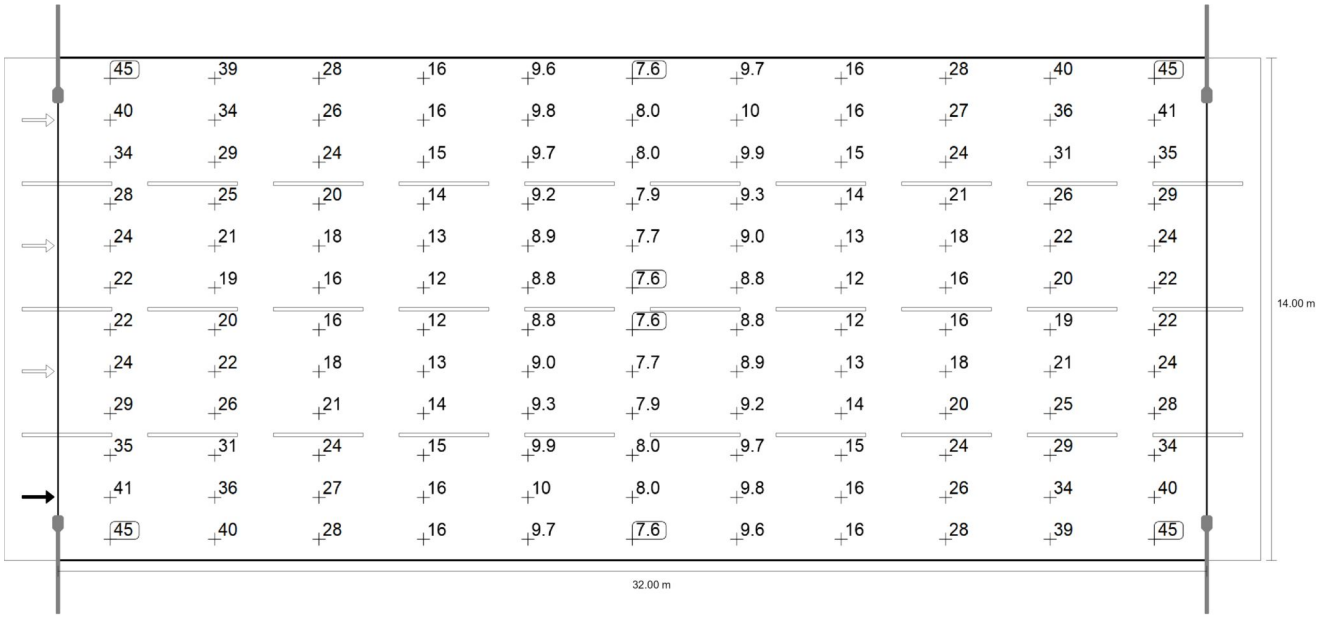
	Symbol	Calculated	Target	Check
Observer 4 Position: -60.000 m, 12.250 m, 1.500 m	L_{av}	1.22 cd/m²	≥ 1.00 cd/m²	✓
	U_o	0.49	≥ 0.40	✓
	U_l	0.42	≥ 0.60	✗
	TI	6 %	≤ 15 %	✓



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

Street 1

Roadway 1 (M3)



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

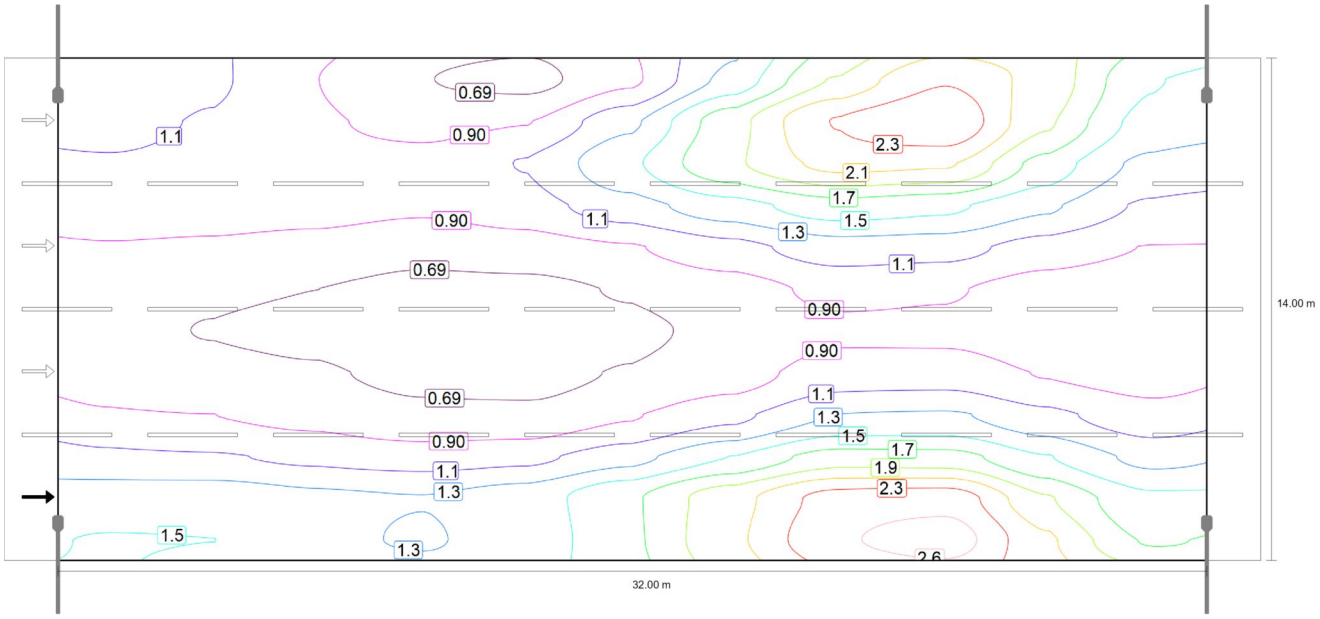
m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	44.60	38.66	27.70	16.02	9.56	7.59	9.67	16.09	28.19	40.16	45.34
12.250	40.23	34.40	26.30	15.89	9.85	7.97	10.06	16.08	26.96	36.38	40.88
11.083	34.19	29.36	23.63	15.15	9.68	8.03	9.86	15.34	24.30	31.02	34.68
9.917	28.15	24.94	20.48	13.94	9.22	7.87	9.32	14.06	20.97	26.10	28.51
8.750	23.89	21.38	17.99	12.87	8.94	7.71	8.95	12.92	18.32	22.05	24.15
7.583	22.11	19.44	16.34	12.27	8.77	7.58	8.75	12.30	16.49	19.68	22.21
6.417	22.21	19.68	16.49	12.30	8.75	7.58	8.77	12.27	16.34	19.44	22.11
5.250	24.15	22.05	18.32	12.92	8.95	7.71	8.94	12.87	17.99	21.38	23.89
4.083	28.51	26.10	20.97	14.06	9.32	7.87	9.22	13.94	20.48	24.94	28.15
2.917	34.68	31.02	24.30	15.34	9.86	8.03	9.68	15.15	23.63	29.36	34.19
1.750	40.88	36.38	26.96	16.08	10.06	7.97	9.85	15.89	26.30	34.40	40.23
0.583	45.34	40.16	28.19	16.09	9.67	7.59	9.56	16.02	27.70	38.66	44.60

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

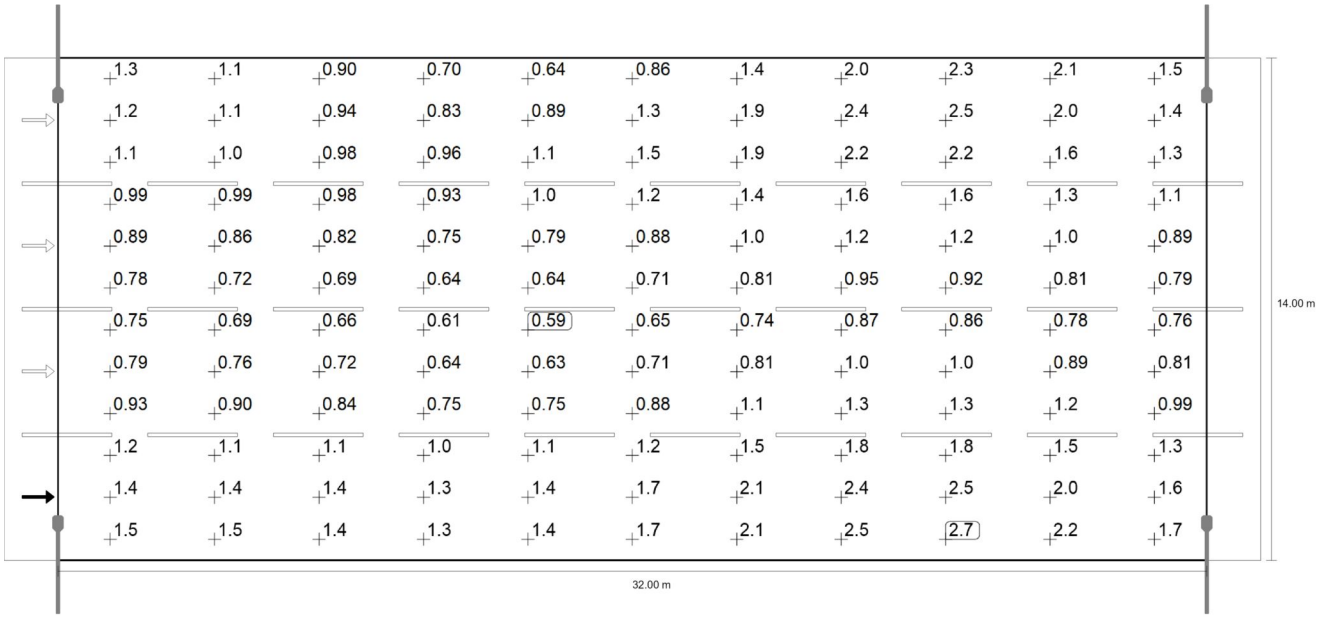
	E_{av}	E_{min}	E_{max}	U_o (g_1)	g_2
Maintenance value, horizontal illuminance	20.2 lx	7.58 lx	45.3 lx	0.38	0.17

Street 1

Roadway 1 (M3)



Observer 1: Maintenance value, luminance with dry roadway [cd/m²] (Iso-illuminance curves)



Observer 1: Maintenance value, luminance with dry roadway [cd/m²] (Value grid)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.26	1.15	0.90	0.70	0.64	0.86	1.38	1.96	2.33	2.06	1.54
12.250	1.19	1.08	0.94	0.83	0.89	1.27	1.85	2.36	2.51	1.97	1.44

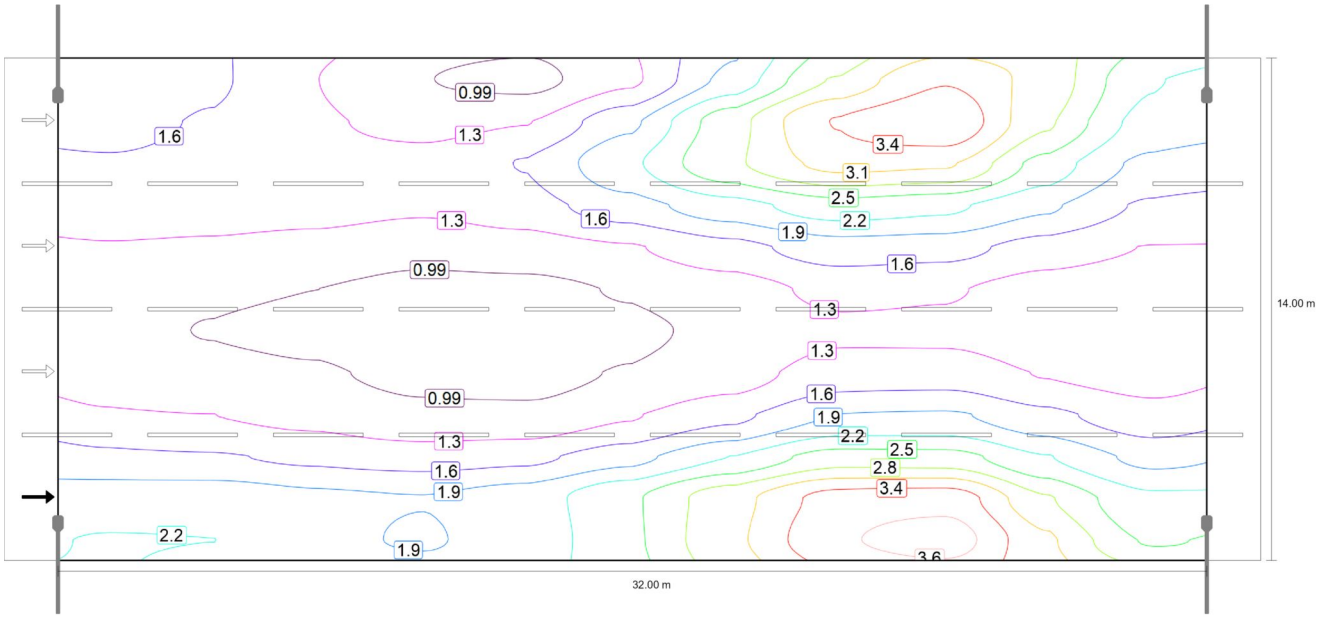
Street 1

Roadway 1 (M3)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
11.083	1.08	1.02	0.98	0.96	1.12	1.48	1.90	2.20	2.17	1.64	1.26
9.917	0.99	0.99	0.98	0.93	1.02	1.22	1.44	1.63	1.57	1.35	1.07
8.750	0.89	0.86	0.82	0.75	0.79	0.88	1.04	1.21	1.18	1.01	0.89
7.583	0.78	0.72	0.69	0.64	0.64	0.71	0.81	0.95	0.92	0.81	0.79
6.417	0.75	0.69	0.66	0.61	0.59	0.65	0.74	0.87	0.86	0.78	0.76
5.250	0.79	0.76	0.72	0.64	0.63	0.71	0.81	1.01	1.02	0.89	0.81
4.083	0.93	0.90	0.84	0.75	0.75	0.88	1.06	1.32	1.34	1.16	0.99
2.917	1.16	1.13	1.06	1.01	1.05	1.24	1.52	1.83	1.81	1.53	1.25
1.750	1.45	1.45	1.35	1.32	1.41	1.69	2.06	2.43	2.48	1.95	1.57
0.583	1.53	1.52	1.36	1.30	1.39	1.68	2.09	2.51	2.66	2.18	1.70

Observer 1: Maintenance value, luminance with dry roadway [cd/m²] (Value chart)

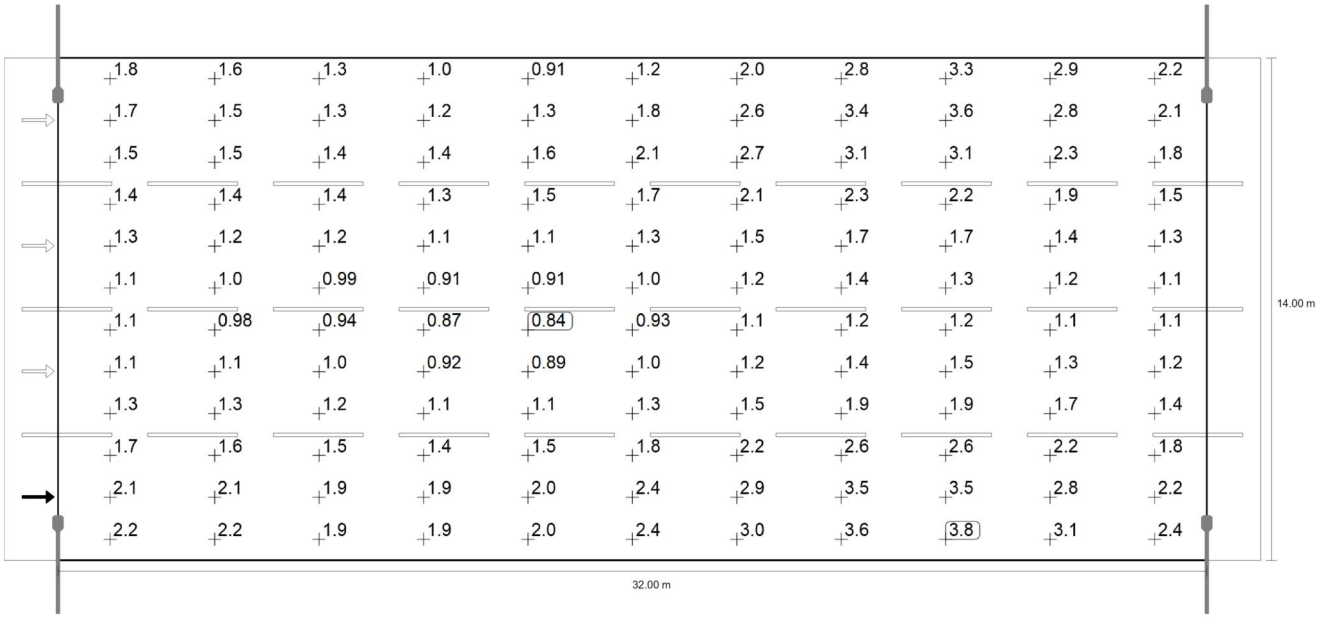
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 1: Maintenance value, luminance with dry roadway	1.21 cd/m²	0.59 cd/m²	2.66 cd/m²	0.49	0.22



Observer 1: Luminance with new installation [cd/m²] (Iso-illuminance curves)

Street 1

Roadway 1 (M3)



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

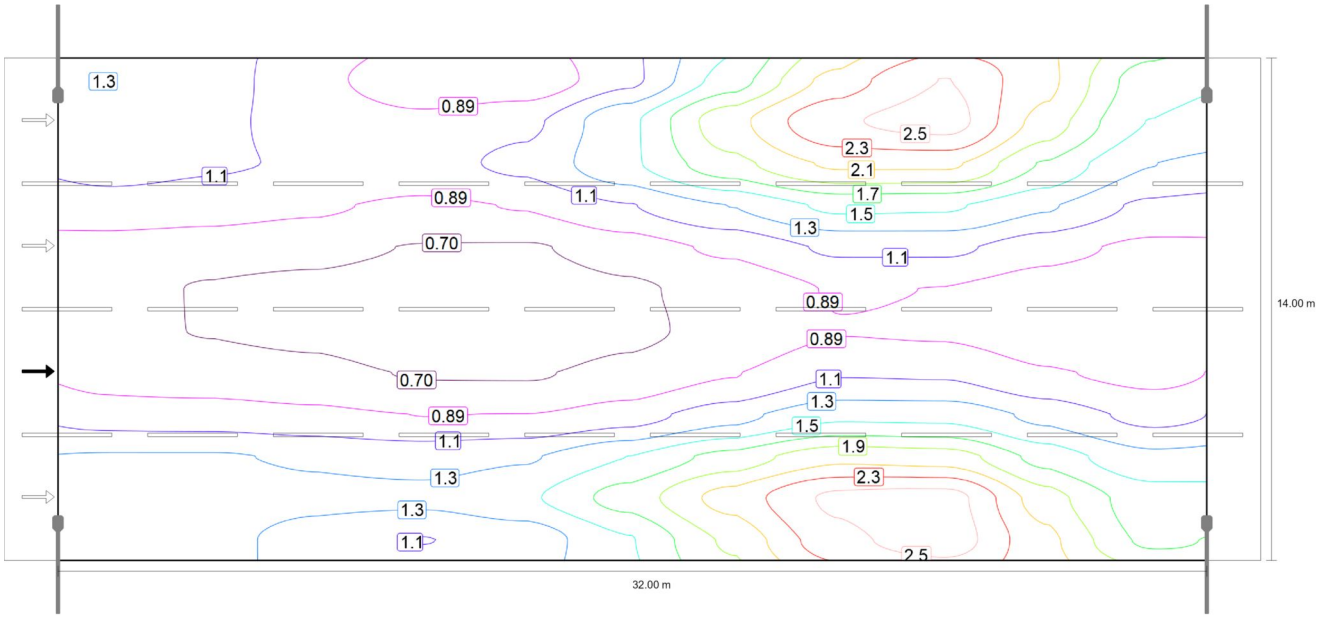
m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.80	1.64	1.29	1.01	0.91	1.23	1.97	2.79	3.33	2.94	2.20
12.250	1.70	1.55	1.34	1.18	1.28	1.81	2.65	3.37	3.59	2.81	2.05
11.083	1.54	1.46	1.40	1.38	1.59	2.11	2.72	3.15	3.09	2.35	1.80
9.917	1.41	1.42	1.40	1.33	1.46	1.75	2.05	2.33	2.24	1.93	1.53
8.750	1.26	1.23	1.17	1.08	1.13	1.26	1.48	1.73	1.69	1.45	1.28
7.583	1.12	1.03	0.99	0.91	0.91	1.01	1.15	1.36	1.32	1.16	1.12
6.417	1.08	0.98	0.94	0.87	0.84	0.93	1.05	1.24	1.23	1.12	1.09
5.250	1.13	1.08	1.03	0.92	0.89	1.02	1.16	1.44	1.46	1.27	1.16
4.083	1.33	1.29	1.21	1.08	1.07	1.26	1.51	1.88	1.92	1.66	1.41
2.917	1.66	1.61	1.52	1.44	1.50	1.77	2.18	2.61	2.59	2.18	1.79
1.750	2.06	2.07	1.93	1.88	2.02	2.41	2.94	3.47	3.54	2.79	2.24
0.583	2.18	2.17	1.95	1.86	1.98	2.40	2.99	3.59	3.80	3.11	2.43

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

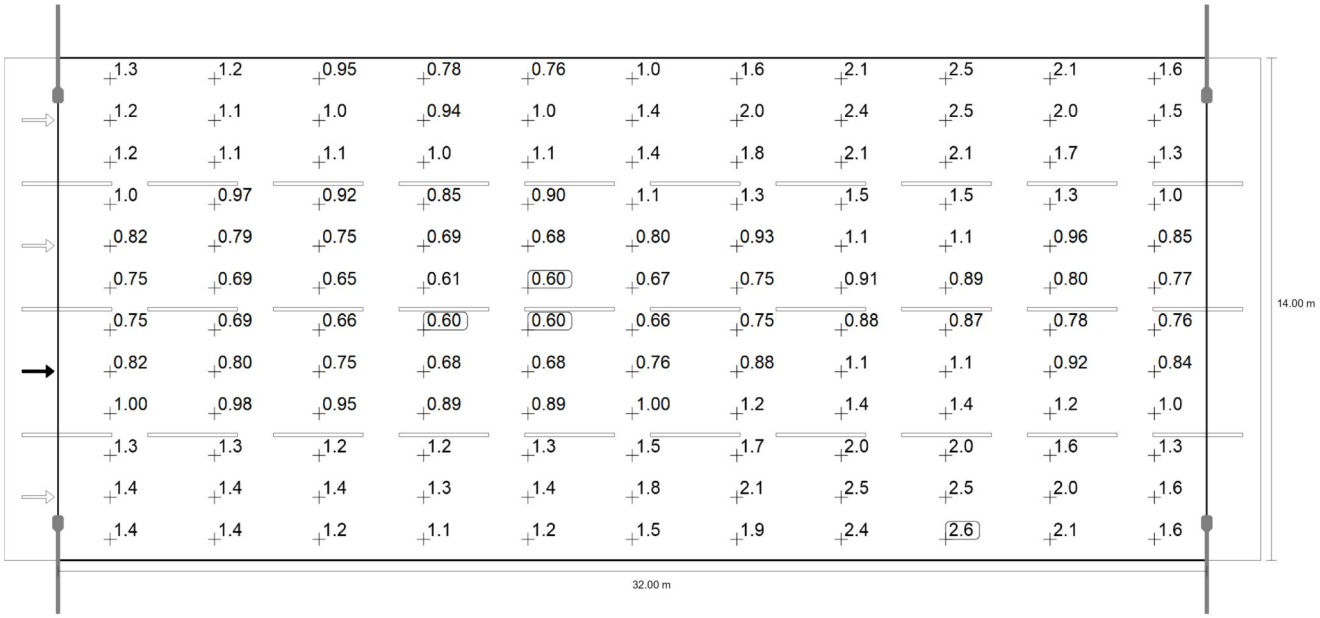
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 1: Luminance with new installation	1.73 cd/m²	0.84 cd/m²	3.80 cd/m²	0.49	0.22

Street 1

Roadway 1 (M3)



Observer 2: Maintenance value, luminance with dry roadway [cd/m²] (Iso-illuminance curves)



Observer 2: Maintenance value, luminance with dry roadway [cd/m²] (Value grid)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.28	1.18	0.95	0.78	0.76	1.04	1.57	2.13	2.46	2.11	1.56
12.250	1.22	1.13	1.02	0.94	1.04	1.44	2.00	2.42	2.53	1.98	1.47

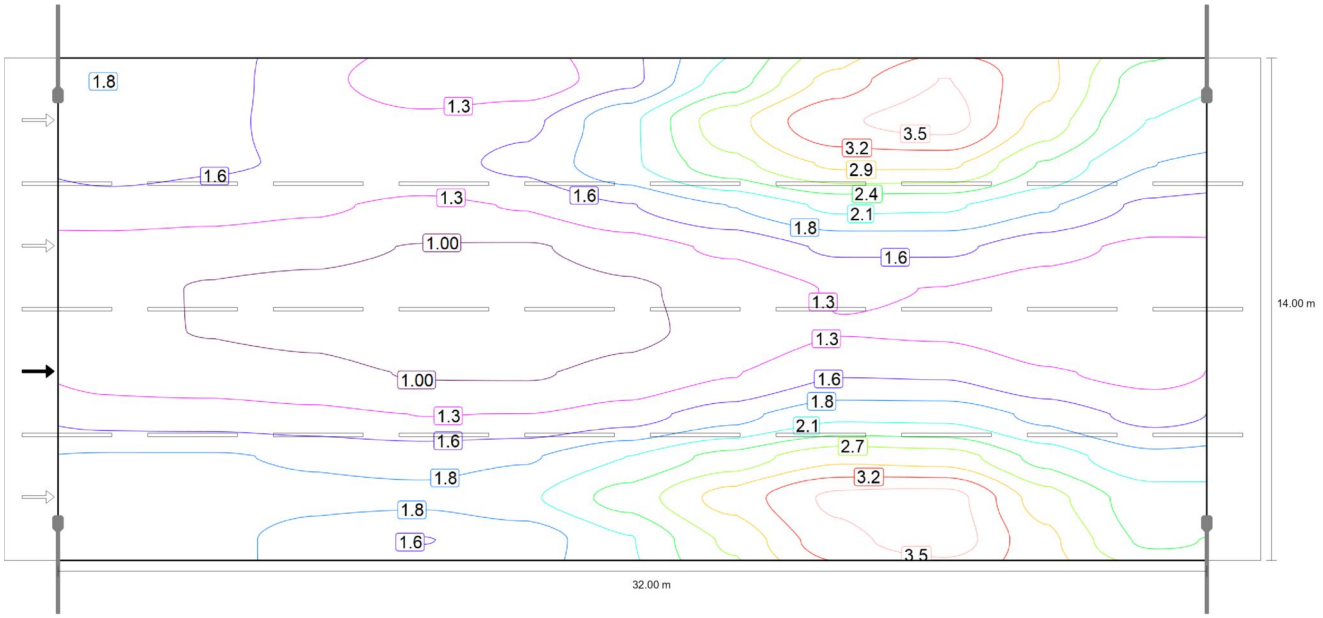
Street 1

Roadway 1 (M3)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
11.083	1.16	1.11	1.07	1.03	1.13	1.44	1.80	2.10	2.10	1.65	1.29
9.917	1.00	0.97	0.92	0.85	0.90	1.08	1.29	1.52	1.50	1.31	1.05
8.750	0.82	0.79	0.75	0.69	0.68	0.80	0.93	1.12	1.12	0.96	0.85
7.583	0.75	0.69	0.65	0.61	0.60	0.67	0.75	0.91	0.89	0.80	0.77
6.417	0.75	0.69	0.66	0.60	0.60	0.66	0.75	0.88	0.87	0.78	0.76
5.250	0.82	0.80	0.75	0.68	0.68	0.76	0.88	1.08	1.07	0.92	0.84
4.083	1.00	0.98	0.95	0.89	0.89	1.00	1.21	1.44	1.43	1.23	1.03
2.917	1.30	1.30	1.24	1.20	1.26	1.48	1.74	2.01	1.97	1.60	1.33
1.750	1.43	1.44	1.36	1.33	1.45	1.75	2.14	2.49	2.52	1.96	1.57
0.583	1.39	1.36	1.17	1.08	1.17	1.47	1.90	2.38	2.55	2.11	1.63

Observer 2: Maintenance value, luminance with dry roadway [cd/m²] (Value chart)

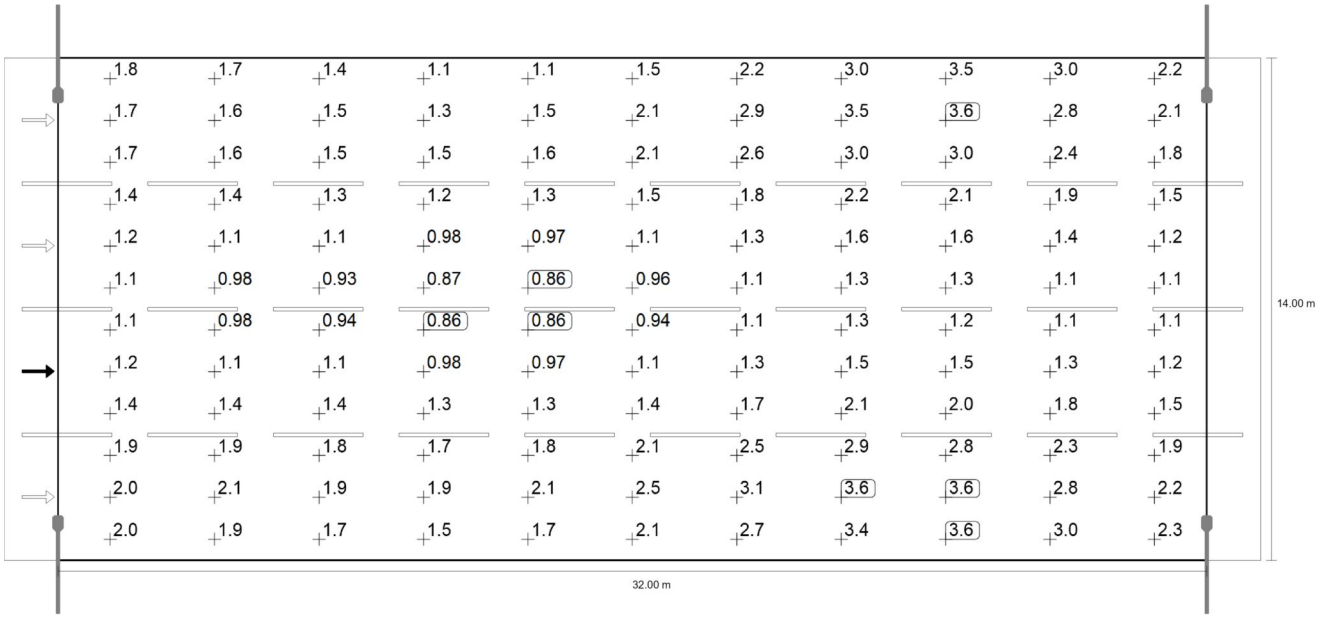
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 2: Maintenance value, luminance with dry roadway	1.23 cd/m²	0.60 cd/m²	2.55 cd/m²	0.49	0.23



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

Street 1

Roadway 1 (M3)



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

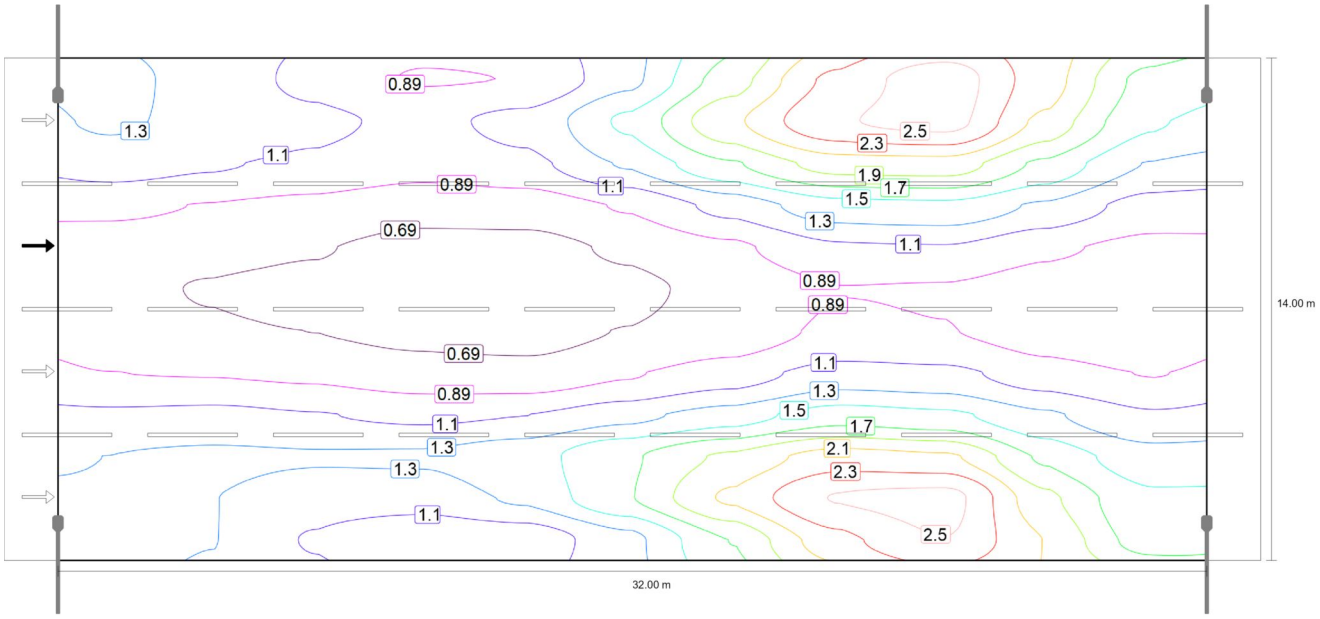
m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.83	1.69	1.36	1.12	1.08	1.48	2.25	3.04	3.51	3.01	2.23
12.250	1.74	1.62	1.46	1.34	1.49	2.05	2.85	3.45	3.62	2.83	2.10
11.083	1.65	1.58	1.53	1.46	1.62	2.06	2.58	3.00	3.00	2.36	1.84
9.917	1.43	1.39	1.32	1.21	1.29	1.54	1.84	2.17	2.15	1.87	1.49
8.750	1.17	1.13	1.08	0.98	0.97	1.14	1.33	1.60	1.61	1.38	1.22
7.583	1.07	0.98	0.93	0.87	0.86	0.96	1.08	1.30	1.27	1.14	1.10
6.417	1.07	0.98	0.94	0.86	0.86	0.94	1.07	1.26	1.24	1.12	1.08
5.250	1.17	1.14	1.08	0.98	0.97	1.09	1.26	1.54	1.52	1.31	1.21
4.083	1.42	1.41	1.35	1.27	1.28	1.43	1.73	2.05	2.04	1.75	1.47
2.917	1.86	1.86	1.78	1.71	1.80	2.11	2.49	2.87	2.82	2.29	1.91
1.750	2.04	2.05	1.94	1.90	2.07	2.51	3.05	3.56	3.61	2.80	2.24
0.583	1.99	1.94	1.67	1.55	1.67	2.09	2.72	3.40	3.64	3.02	2.33

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

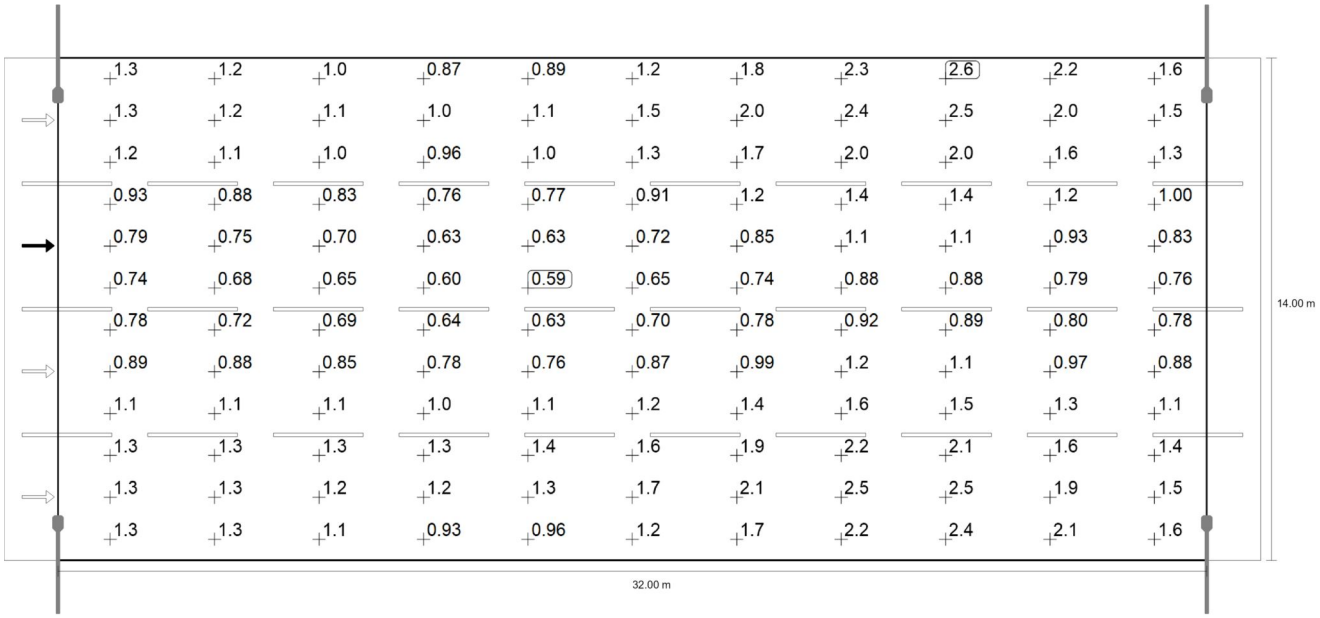
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 2: Luminance with new installation	1.76 cd/m²	0.86 cd/m²	3.64 cd/m²	0.49	0.23

Street 1

Roadway 1 (M3)



Observer 3: Maintenance value, luminance with dry roadway [cd/m²] (Iso-illuminance curves)



Observer 3: Maintenance value, luminance with dry roadway [cd/m²] (Value grid)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.31	1.23	1.02	0.87	0.89	1.22	1.77	2.31	2.55	2.15	1.60
12.250	1.30	1.23	1.13	1.04	1.13	1.51	2.03	2.43	2.53	2.00	1.50

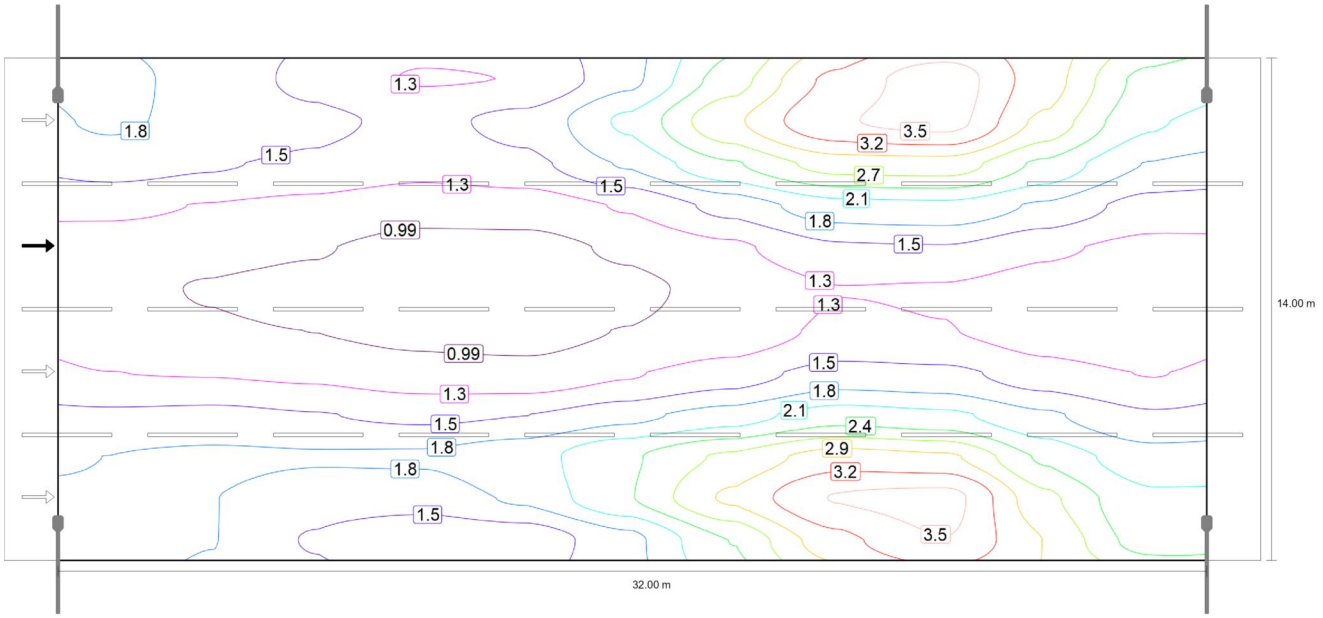
Street 1

Roadway 1 (M3)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
11.083	1.17	1.11	1.04	0.96	1.03	1.30	1.65	1.95	1.97	1.62	1.27
9.917	0.93	0.88	0.83	0.76	0.77	0.91	1.15	1.40	1.43	1.25	1.00
8.750	0.79	0.75	0.70	0.63	0.63	0.72	0.85	1.05	1.07	0.93	0.83
7.583	0.74	0.68	0.65	0.60	0.59	0.65	0.74	0.88	0.88	0.79	0.76
6.417	0.78	0.72	0.69	0.64	0.63	0.70	0.78	0.92	0.89	0.80	0.78
5.250	0.89	0.88	0.85	0.78	0.76	0.87	0.99	1.16	1.14	0.97	0.88
4.083	1.12	1.14	1.09	1.04	1.08	1.22	1.38	1.58	1.52	1.31	1.11
2.917	1.28	1.31	1.29	1.30	1.39	1.64	1.90	2.16	2.10	1.63	1.36
1.750	1.29	1.28	1.19	1.17	1.31	1.66	2.10	2.47	2.51	1.92	1.51
0.583	1.34	1.28	1.06	0.93	0.96	1.22	1.68	2.18	2.44	2.05	1.57

Observer 3: Maintenance value, luminance with dry roadway [cd/m²] (Value chart)

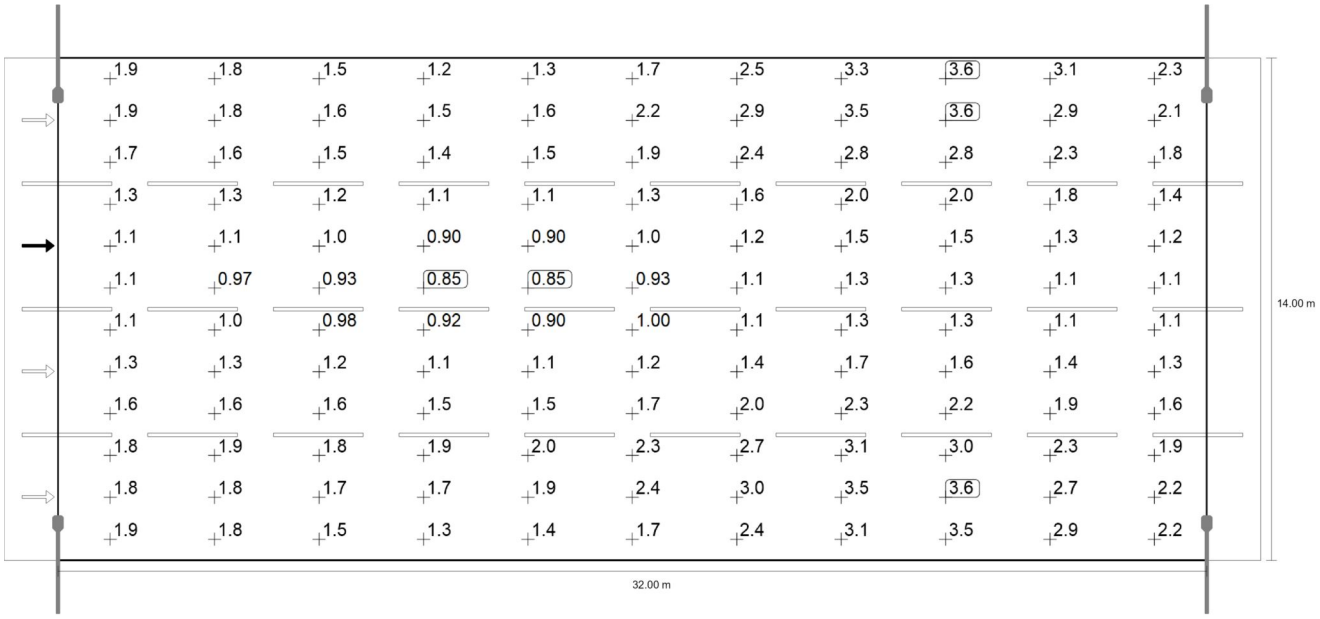
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 3: Maintenance value, luminance with dry roadway	1.23 cd/m²	0.59 cd/m²	2.55 cd/m²	0.48	0.23



Observer 3: Luminance with new installation [cd/m²] (Iso-illuminance curves)

Street 1

Roadway 1 (M3)



Observer 3: Luminance with new installation [cd/m²] (Value grid)

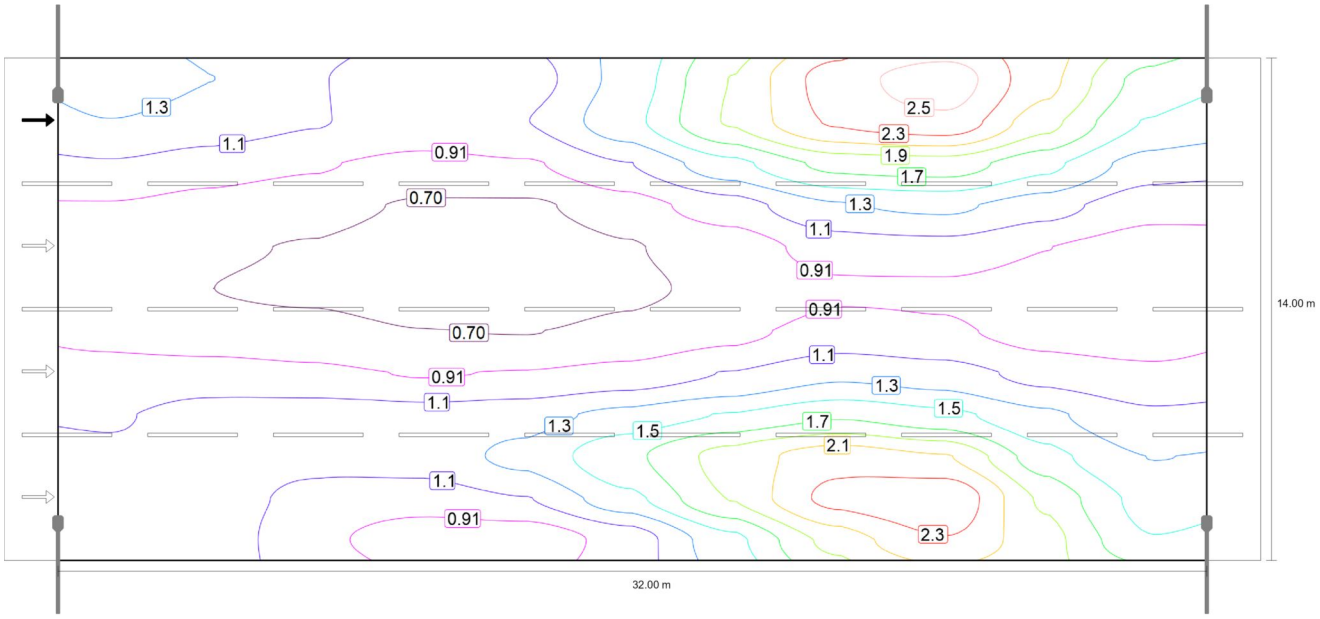
m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.88	1.75	1.45	1.25	1.27	1.75	2.53	3.30	3.65	3.07	2.28
12.250	1.86	1.75	1.61	1.49	1.62	2.16	2.89	3.47	3.61	2.86	2.14
11.083	1.67	1.58	1.48	1.38	1.47	1.86	2.36	2.79	2.81	2.32	1.81
9.917	1.33	1.25	1.19	1.08	1.11	1.29	1.64	1.99	2.04	1.78	1.43
8.750	1.13	1.07	1.00	0.90	0.90	1.03	1.21	1.50	1.53	1.33	1.19
7.583	1.06	0.97	0.93	0.85	0.85	0.93	1.06	1.26	1.25	1.13	1.08
6.417	1.12	1.03	0.98	0.92	0.90	1.00	1.11	1.32	1.28	1.15	1.12
5.250	1.27	1.25	1.21	1.12	1.09	1.24	1.41	1.66	1.62	1.38	1.26
4.083	1.60	1.63	1.56	1.48	1.54	1.74	1.97	2.26	2.18	1.87	1.59
2.917	1.83	1.86	1.85	1.85	1.99	2.34	2.72	3.08	3.00	2.33	1.94
1.750	1.85	1.83	1.70	1.67	1.87	2.37	3.00	3.52	3.59	2.74	2.16
0.583	1.91	1.83	1.52	1.33	1.37	1.75	2.40	3.12	3.49	2.94	2.24

Observer 3: Luminance with new installation [cd/m²] (Value chart)

	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 3: Luminance with new installation	1.76 cd/m²	0.85 cd/m²	3.65 cd/m²	0.48	0.23

Street 1

Roadway 1 (M3)



Observer 4: Maintenance value, luminance with dry roadway [cd/m²] (Iso-illuminance curves)

Observer 4: Maintenance value, luminance with dry roadway [cd/m²] (Value grid)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.39	1.32	1.13	1.00	1.03	1.39	1.94	2.43	2.64	2.19	1.64
12.250	1.31	1.24	1.13	1.03	1.11	1.46	1.95	2.36	2.48	1.99	1.50

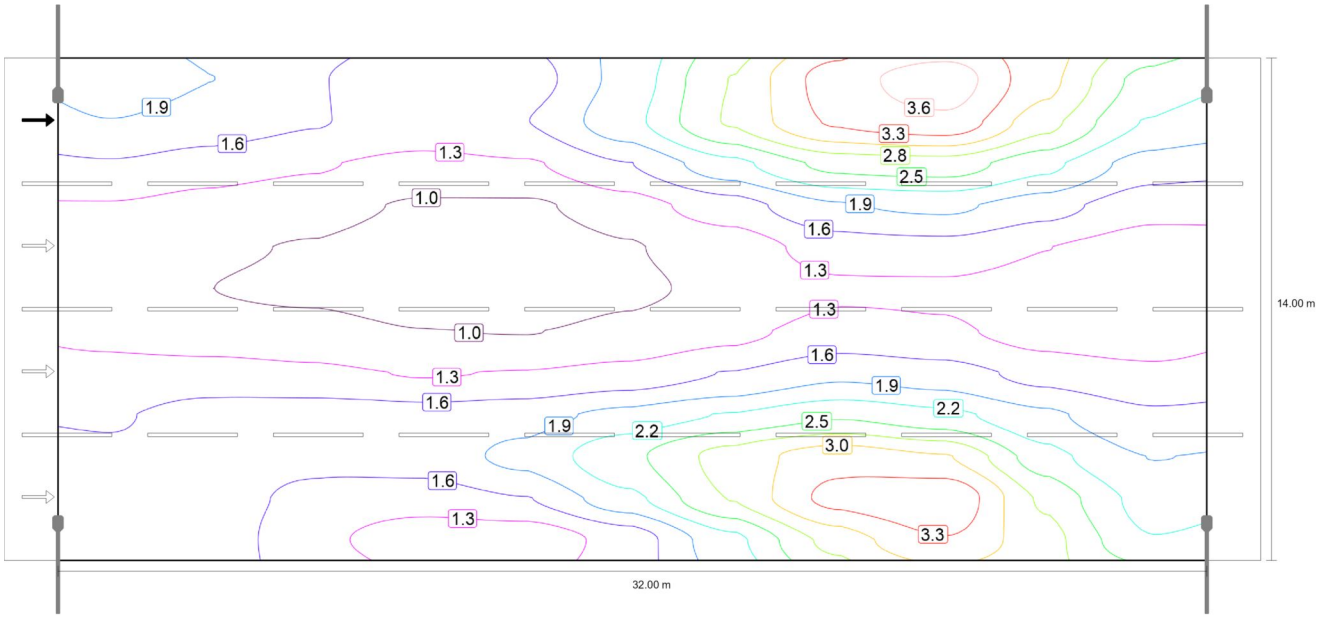
Street 1

Roadway 1 (M3)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
11.083	1.09	1.00	0.93	0.85	0.89	1.11	1.46	1.79	1.83	1.57	1.22
9.917	0.90	0.83	0.78	0.68	0.68	0.82	1.02	1.29	1.35	1.20	0.98
8.750	0.78	0.73	0.69	0.62	0.60	0.69	0.80	1.00	1.04	0.91	0.82
7.583	0.78	0.70	0.68	0.63	0.61	0.67	0.75	0.88	0.88	0.81	0.78
6.417	0.84	0.79	0.77	0.71	0.70	0.76	0.85	0.99	0.94	0.83	0.82
5.250	1.00	1.00	0.96	0.89	0.92	0.99	1.12	1.28	1.21	1.04	0.95
4.083	1.10	1.17	1.19	1.17	1.23	1.38	1.53	1.70	1.59	1.36	1.15
2.917	1.14	1.16	1.15	1.20	1.37	1.67	2.00	2.25	2.15	1.60	1.31
1.750	1.24	1.20	1.06	0.99	1.10	1.46	1.94	2.40	2.48	1.89	1.45
0.583	1.30	1.22	0.97	0.80	0.78	1.00	1.46	2.00	2.32	2.00	1.54

Observer 4: Maintenance value, luminance with dry roadway [cd/m²] (Value chart)

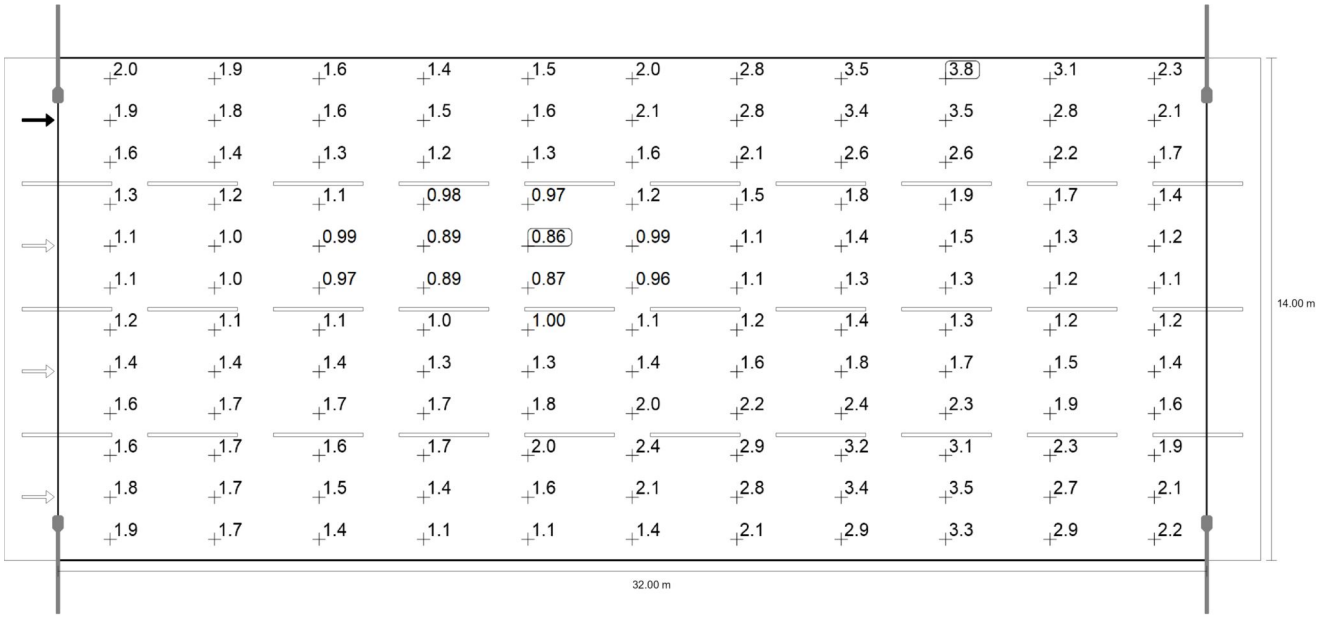
	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 4: Maintenance value, luminance with dry roadway	1.22 cd/m²	0.60 cd/m²	2.64 cd/m²	0.49	0.23



Observer 4: Luminance with new installation [cd/m²] (Iso-illuminance curves)

Street 1

Roadway 1 (M3)



Observer 4: Luminance with new installation [cd/m²] (Value grid)

m	1.455	4.364	7.273	10.182	13.091	16.000	18.909	21.818	24.727	27.636	30.545
13.417	1.99	1.88	1.61	1.43	1.48	1.98	2.77	3.47	3.77	3.13	2.35
12.250	1.87	1.76	1.61	1.48	1.59	2.08	2.79	3.38	3.54	2.85	2.15
11.083	1.56	1.44	1.33	1.21	1.27	1.59	2.08	2.56	2.61	2.25	1.74
9.917	1.28	1.19	1.11	0.98	0.97	1.17	1.46	1.85	1.93	1.71	1.39
8.750	1.12	1.05	0.99	0.89	0.86	0.99	1.14	1.43	1.48	1.30	1.17
7.583	1.11	1.01	0.97	0.89	0.87	0.96	1.07	1.26	1.26	1.15	1.11
6.417	1.20	1.14	1.10	1.01	1.00	1.09	1.22	1.42	1.35	1.19	1.17
5.250	1.42	1.43	1.37	1.28	1.32	1.41	1.60	1.82	1.73	1.48	1.36
4.083	1.57	1.67	1.69	1.68	1.76	1.98	2.19	2.43	2.27	1.94	1.65
2.917	1.63	1.66	1.65	1.72	1.96	2.39	2.86	3.22	3.07	2.29	1.87
1.750	1.78	1.71	1.51	1.42	1.58	2.08	2.77	3.43	3.55	2.69	2.07
0.583	1.86	1.75	1.39	1.15	1.11	1.43	2.09	2.85	3.31	2.85	2.19

Observer 4: Luminance with new installation [cd/m²] (Value chart)

	L_{av}	L_{min}	L_{max}	U_o (g_1)	g_2
Observer 4: Luminance with new installation	1.75 cd/m²	0.86 cd/m²	3.77 cd/m²	0.49	0.23