

**Riigitee nr 8 km 34,8 - 35,0 ja riigitee nr 11196 km 0,0 - 0,1 ning
bussipeatuste valgustus**

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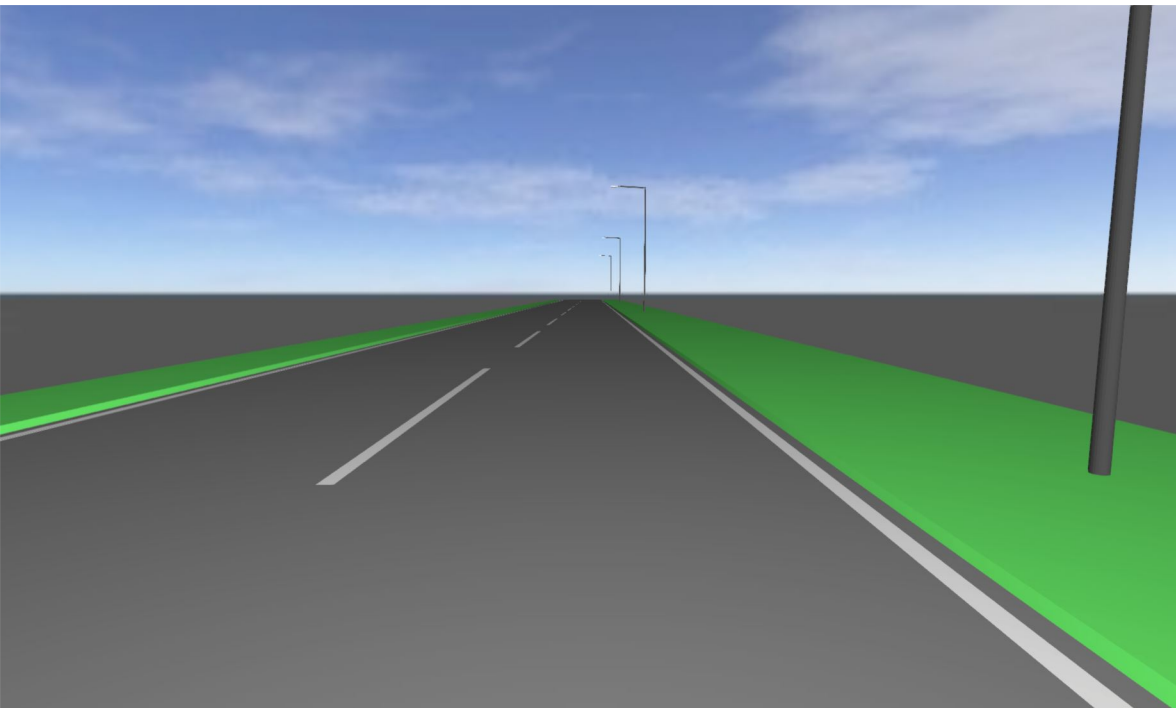
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Description

Projekteerija

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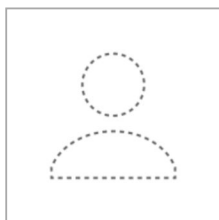
Luminaire list

Φ_{total} 36380 lm	P_{total} 260.0 W	Luminous efficacy 139.9 lm/W
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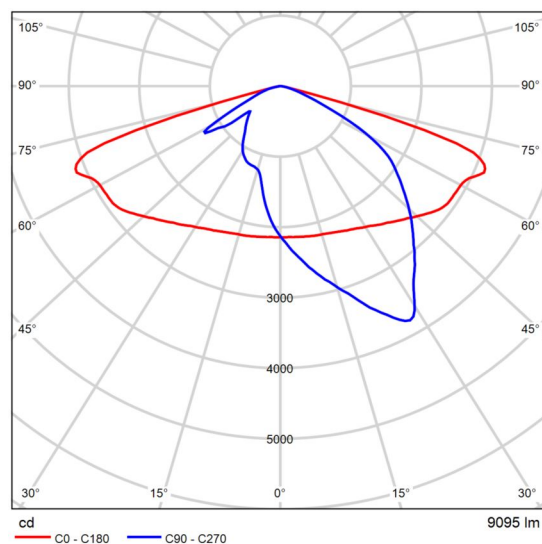
pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
4	Not yet a DIALux member	Mini Martin 65 W 48 LEDs	MRS 065 730 V05 F048_Bin-N4_TH	65.0 W	9095 lm	139.9 lm/W

Product data sheet

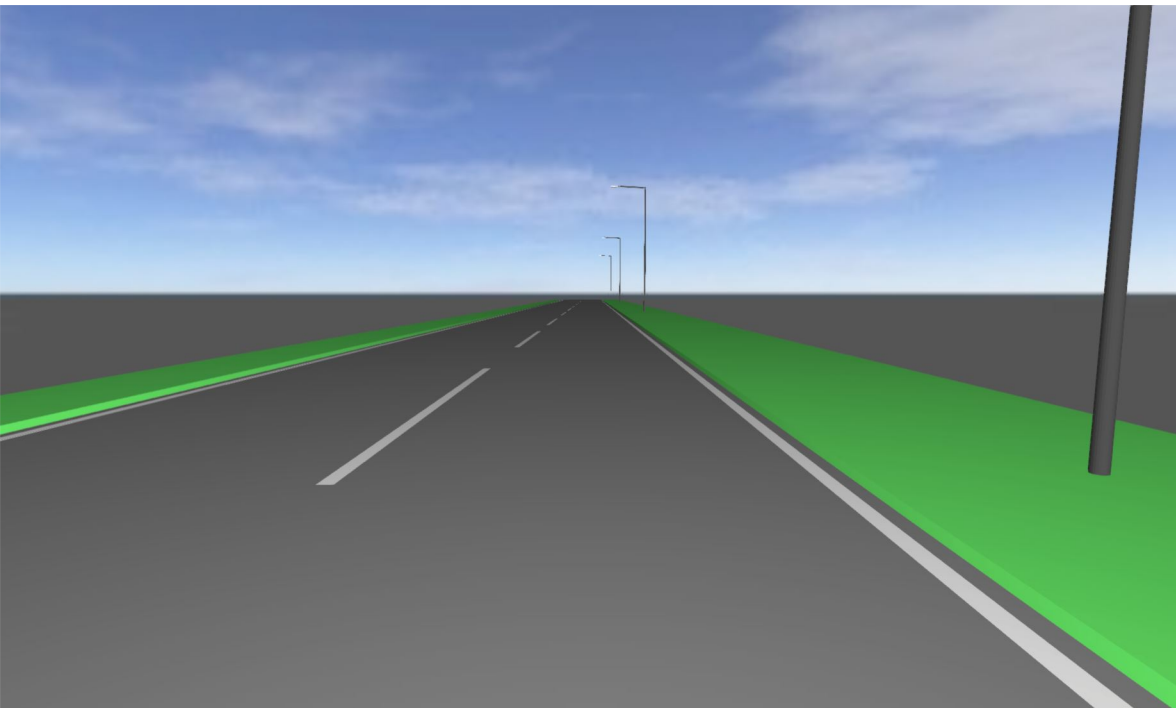
Not yet a DIALux member - MRS 065 730 V05 F048_Bin-N4_TH



Article No.	Mini Martin 65 W 48 LEDs
P	65.0 W
$\Phi_{\text{Luminaire}}$	9095 lm
Luminous efficacy	139.9 lm/W
CCT	3000 K
CRI	70



Polar LDC

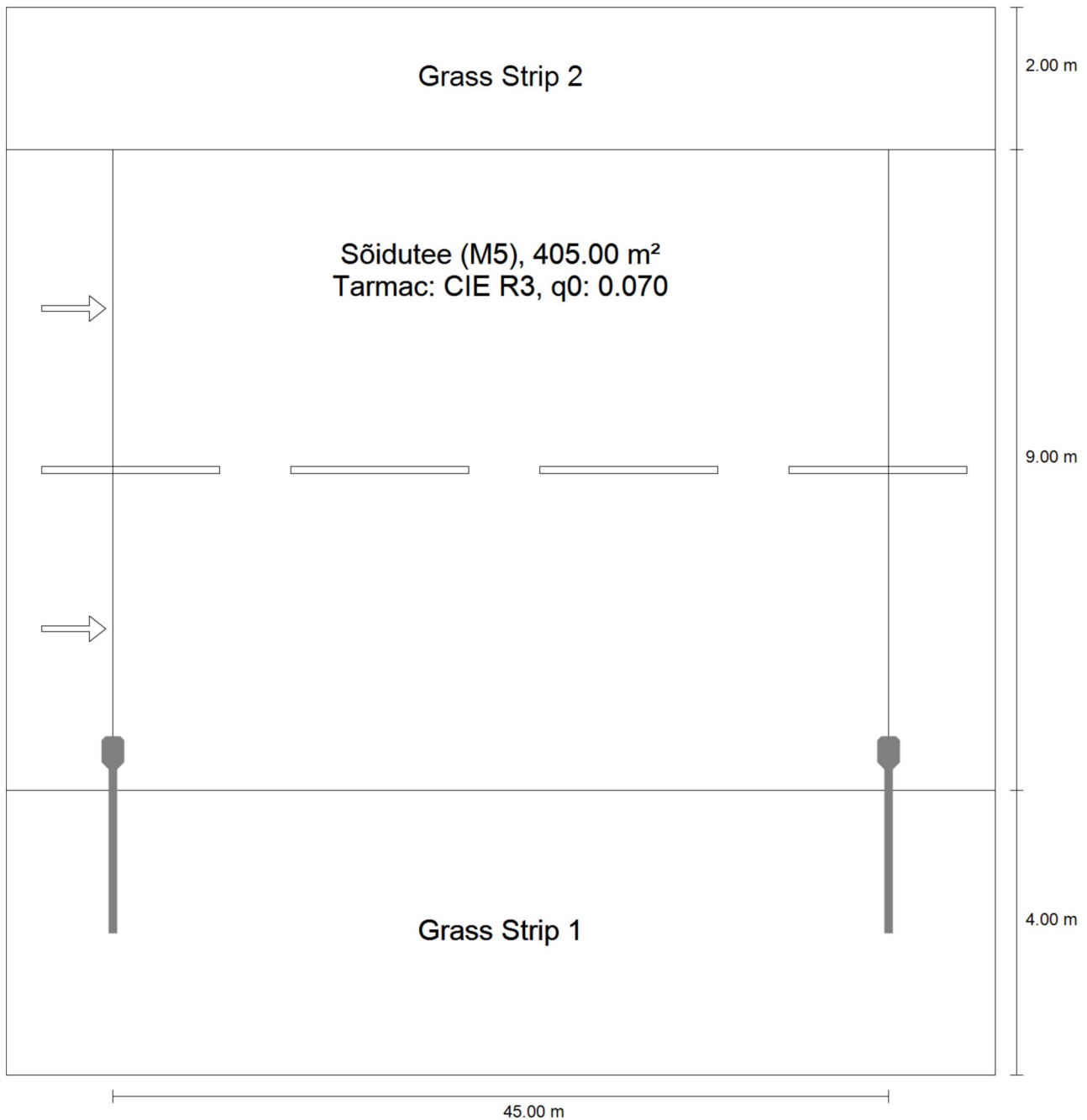


Riigi tee nr 8

Description

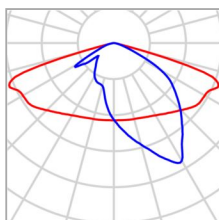
Riigi tee nr 8

Summary (according to EN 13201:2015)



Riigi tee nr 8

Summary (according to EN 13201:2015)



Manufacturer	Not yet a DIALux member
Article No.	Mini Martin 65 W 48 LEDs
Article name	MRS 065 730 V05 F048_Bin-N4_TH
Fitting	1x 48 LEDs bin N4

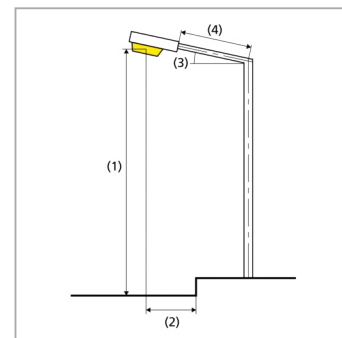
P	65.0 W
$\Phi_{\text{Luminaire}}$	9095 lm

Riigi tee nr 8

Summary (according to EN 13201:2015)

MRS 065 730 V05 F048_Bin-N4_TH (single side bottom)

Pole distance	45.000 m
(1) Light spot height	10.000 m
(2) Light point overhang	0.500 m
(3) Boom inclination	3.0°
(4) Boom length	2.500 m
Annual operating hours	4000 h: 100.0 %, 65.0 W
Consumption	1430.0 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.	$\geq 70^\circ$: 559 cd/klm $\geq 80^\circ$: 80.1 cd/klm $\geq 90^\circ$: 1.14 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	0.80



Results for valuation fields

A maintenance factor of 0.80 was used for calculating for the installation.

	Symbol	Calculated	Target	Check
Sõidutee (M5)	L_{av}	0.55 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.53	≥ 0.35	✓
	U_l	0.50	≥ 0.40	✓
	TI	11 %	≤ 15 %	✓
	R_{EI}	0.46	≥ 0.30	✓

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Summary (according to EN 13201:2015)

Results for energy efficiency indicators

	Symbol	Calculated	Consumption
Riigi tee nr 8	D_p	0.017 W/lx*m ²	–
MRS 065 730 V05 F048_Bin-N4_TH (single side bottom)	D_e	0.6 kWh/m ² yr	260.0 kWh/yr

Riigi tee nr 8

Sõidutee (M5)

Results for valuation field

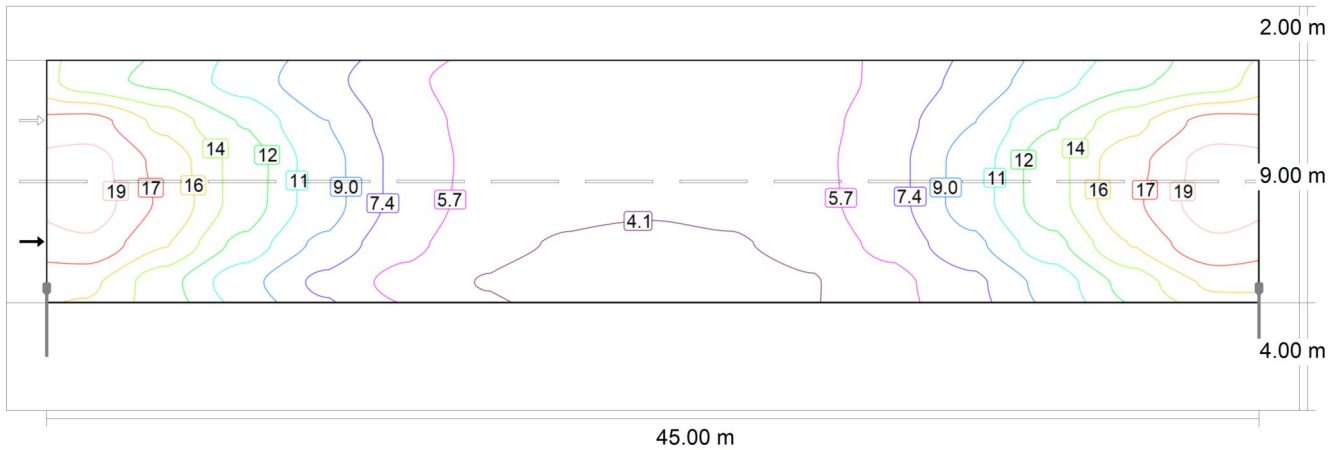
	Symbol	Calculated	Target	Check
Sõidutee (M5)	L_{av}	0.55 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.53	≥ 0.35	✓
	U_l	0.50	≥ 0.40	✓
	TI	11 %	≤ 15 %	✓
	R_{EI}	0.46	≥ 0.30	✓

Results for observer

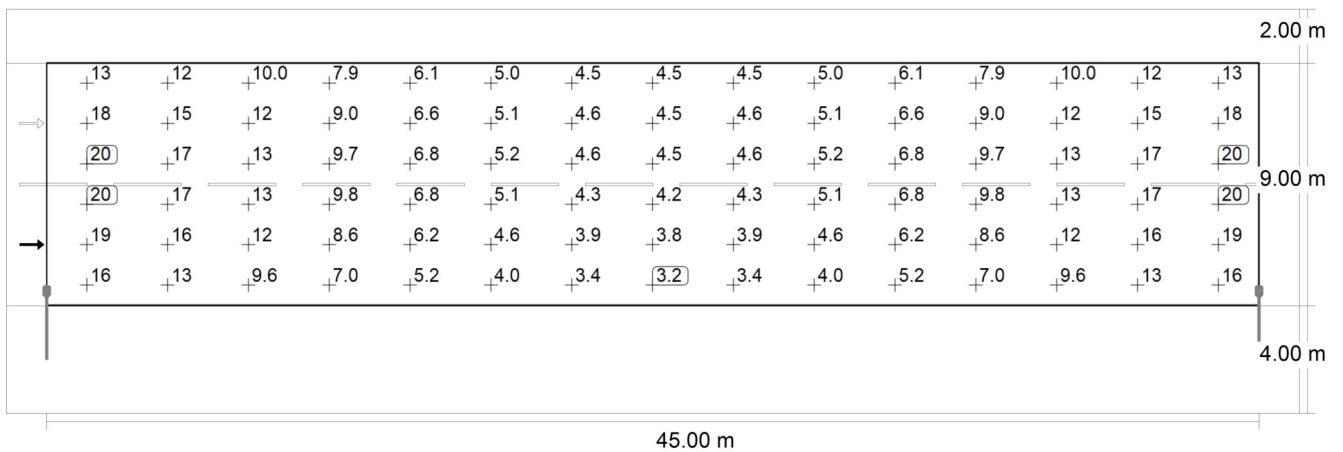
	Symbol	Calculated	Target	Check
Observer 1 Position: -60.000 m, 6.250 m, 1.500 m	L_{av}	0.55 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.53	≥ 0.35	✓
	U_l	0.50	≥ 0.40	✓
	TI	11 %	≤ 15 %	✓
Observer 2 Position: -60.000 m, 10.750 m, 1.500 m	L_{av}	0.59 cd/m ²	≥ 0.50 cd/m ²	✓
	U_o	0.56	≥ 0.35	✓
	U_l	0.70	≥ 0.40	✓
	TI	8 %	≤ 15 %	✓

Riigi tee nr 8

Sõidutee (M5)



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



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

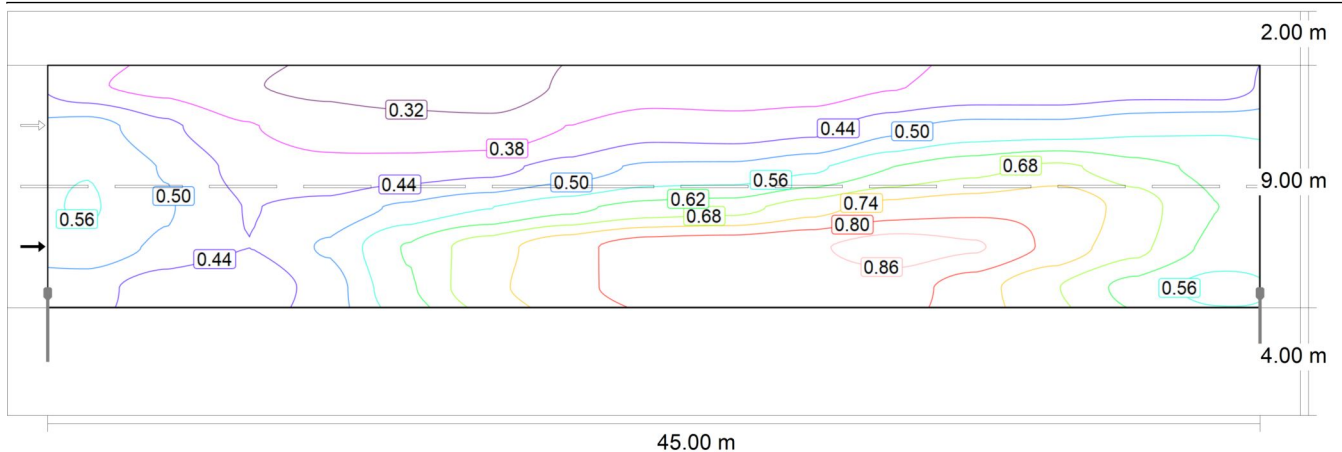
Riigi tee nr 8

Sõidutee (M5)

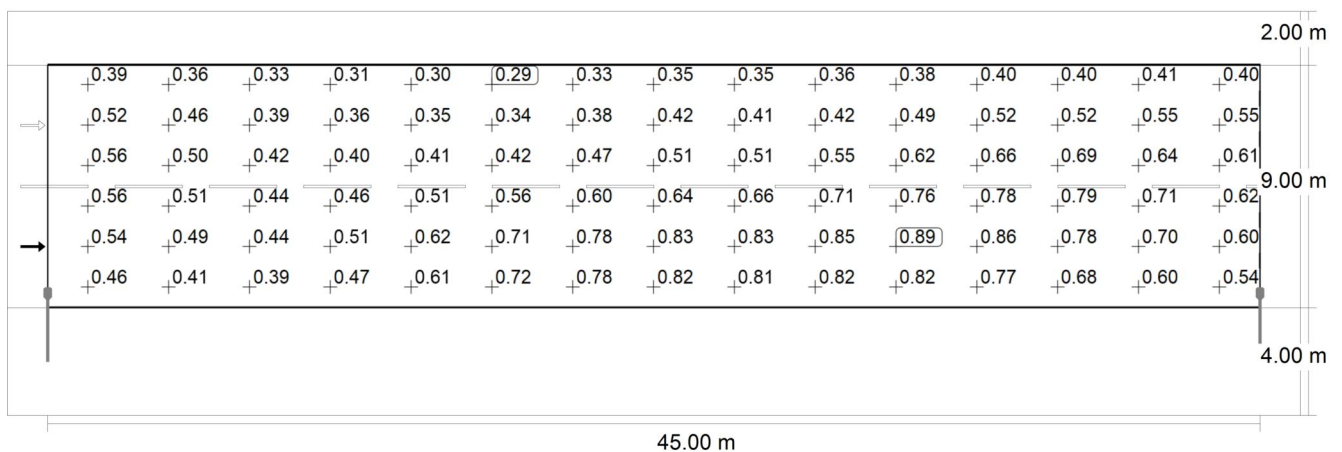
m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500	31.500	34.500	37.500	40.500	43.500
12.250	13.15	11.99	9.98	7.88	6.07	4.95	4.52	4.45	4.52	4.95	6.07	7.88	9.98	11.99	13.15
10.750	17.97	15.19	12.20	9.02	6.57	5.15	4.61	4.54	4.61	5.15	6.57	9.02	12.20	15.19	17.97
9.250	19.65	16.80	13.38	9.73	6.85	5.24	4.57	4.47	4.57	5.24	6.85	9.73	13.38	16.80	19.65
7.750	19.80	17.07	13.32	9.77	6.83	5.10	4.34	4.19	4.34	5.10	6.83	9.77	13.32	17.07	19.80
6.250	18.62	15.79	11.83	8.63	6.22	4.63	3.91	3.76	3.91	4.63	6.22	8.63	11.83	15.79	18.62
4.750	16.00	13.02	9.64	6.99	5.19	3.96	3.35	3.22	3.35	3.96	5.19	6.99	9.64	13.02	16.00

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

	E_{av}	E_{min}	E_{max}	g_1	g_2
Maintenance value, horizontal illuminance	9.37 lx	3.22 lx	19.8 lx	0.34	0.16



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



Riigi tee nr 8

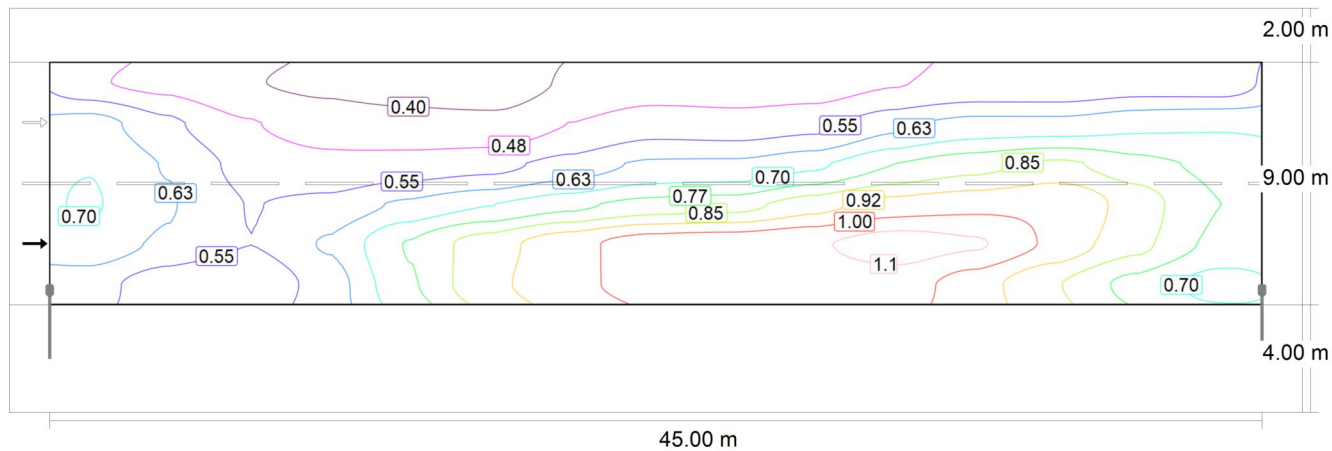
Sõidutee (M5)

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

m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500	31.500	34.500	37.500	40.500	43.500
12.250	0.39	0.36	0.33	0.31	0.30	0.29	0.33	0.35	0.35	0.36	0.38	0.40	0.40	0.41	0.40
10.750	0.52	0.46	0.39	0.36	0.35	0.34	0.38	0.42	0.41	0.42	0.49	0.52	0.52	0.55	0.55
9.250	0.56	0.50	0.42	0.40	0.41	0.42	0.47	0.51	0.51	0.55	0.62	0.66	0.69	0.64	0.61
7.750	0.56	0.51	0.44	0.46	0.51	0.56	0.60	0.64	0.66	0.71	0.76	0.78	0.79	0.71	0.62
6.250	0.54	0.49	0.44	0.51	0.62	0.71	0.78	0.83	0.83	0.85	0.89	0.86	0.78	0.70	0.60
4.750	0.46	0.41	0.39	0.47	0.61	0.72	0.78	0.82	0.81	0.82	0.82	0.77	0.68	0.60	0.54

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

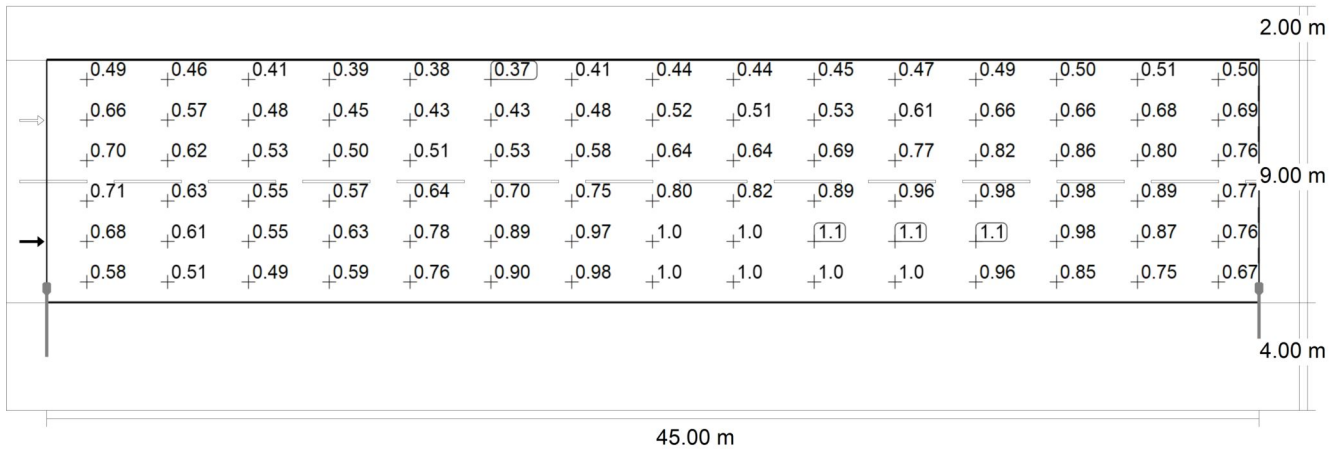
	L_{av}	L_{min}	L_{max}	g_1	g_2
Observer 1: Maintenance value, luminance with dry roadway	0.55 cd/m^2	0.29 cd/m^2	0.89 cd/m^2	0.53	0.33



Observer 1: Luminance with new installation [cd/m^2] (Iso-illuminance curves)

Riigi tee nr 8

Sõidutee (M5)

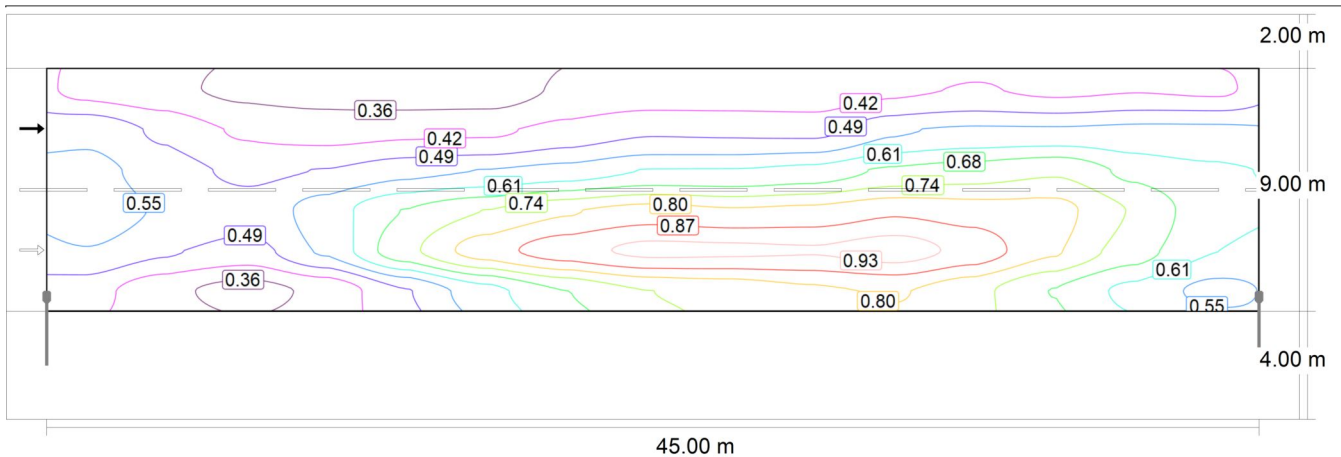


Observer 1: Luminance with new installation [cd/m²] (Value grid)

m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500	31.500	34.500	37.500	40.500	43.500
12.250	0.49	0.46	0.41	0.39	0.38	0.37	0.41	0.44	0.44	0.45	0.47	0.49	0.50	0.51	0.50
10.750	0.66	0.57	0.48	0.45	0.43	0.43	0.48	0.52	0.51	0.53	0.61	0.66	0.66	0.68	0.69
9.250	0.70	0.62	0.53	0.50	0.51	0.53	0.58	0.64	0.64	0.69	0.77	0.82	0.86	0.80	0.76
7.750	0.71	0.63	0.55	0.57	0.64	0.70	0.75	0.80	0.82	0.89	0.96	0.98	0.98	0.89	0.77
6.250	0.68	0.61	0.55	0.63	0.78	0.89	0.97	1.03	1.04	1.06	1.11	1.08	0.98	0.87	0.76
4.750	0.58	0.51	0.49	0.59	0.76	0.90	0.98	1.02	1.02	1.03	1.03	0.96	0.85	0.75	0.67

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

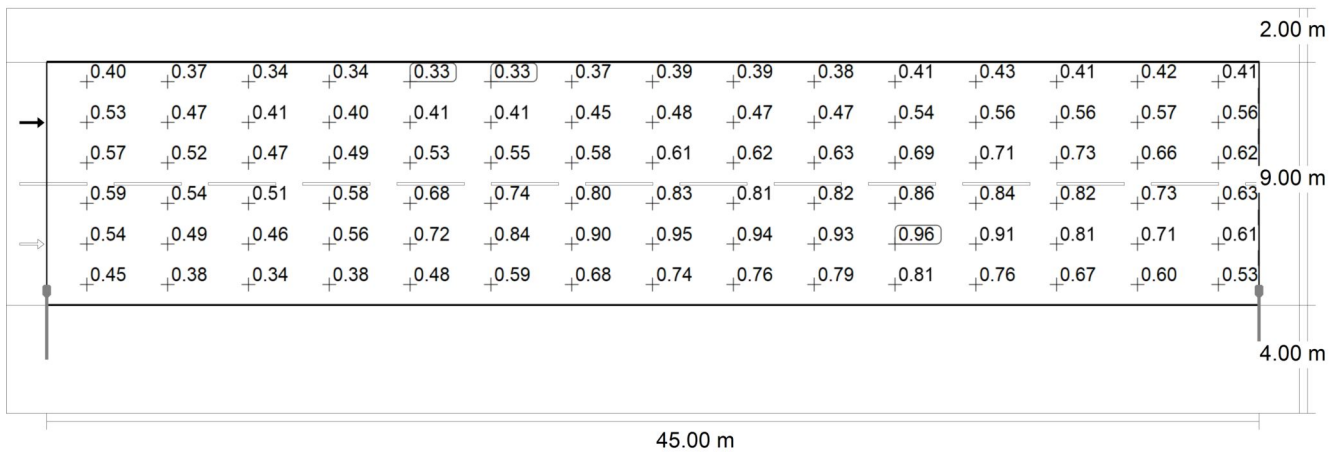
	L _{av}	L _{min}	L _{max}	g ₁	g ₂
Observer 1: Luminance with new installation	0.69 cd/m²	0.37 cd/m²	1.11 cd/m²	0.53	0.33



Riigi tee nr 8

Sõidutee (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)

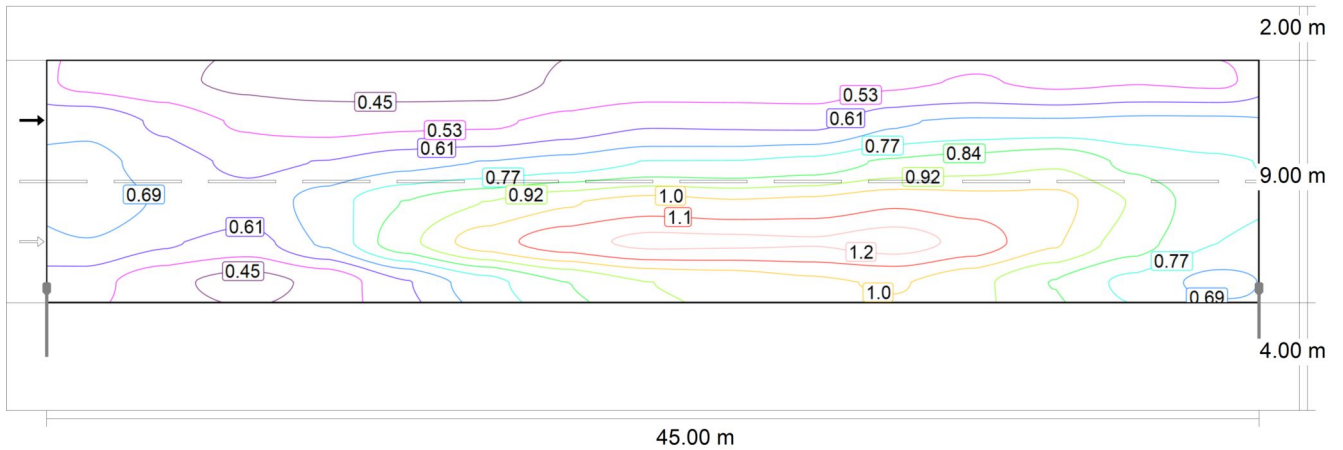
m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500	31.500	34.500	37.500	40.500	43.500
12.250	0.40	0.37	0.34	0.34	0.33	0.33	0.37	0.39	0.39	0.38	0.41	0.43	0.41	0.42	0.41
10.750	0.53	0.47	0.41	0.40	0.41	0.41	0.45	0.48	0.47	0.47	0.54	0.56	0.56	0.57	0.56
9.250	0.57	0.52	0.47	0.49	0.53	0.55	0.58	0.61	0.62	0.63	0.69	0.71	0.73	0.66	0.62
7.750	0.59	0.54	0.51	0.58	0.68	0.74	0.80	0.83	0.81	0.82	0.86	0.84	0.82	0.73	0.63
6.250	0.54	0.49	0.46	0.56	0.72	0.84	0.90	0.95	0.94	0.93	0.96	0.91	0.81	0.71	0.61
4.750	0.45	0.38	0.34	0.38	0.48	0.59	0.68	0.74	0.76	0.79	0.81	0.76	0.67	0.60	0.53

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

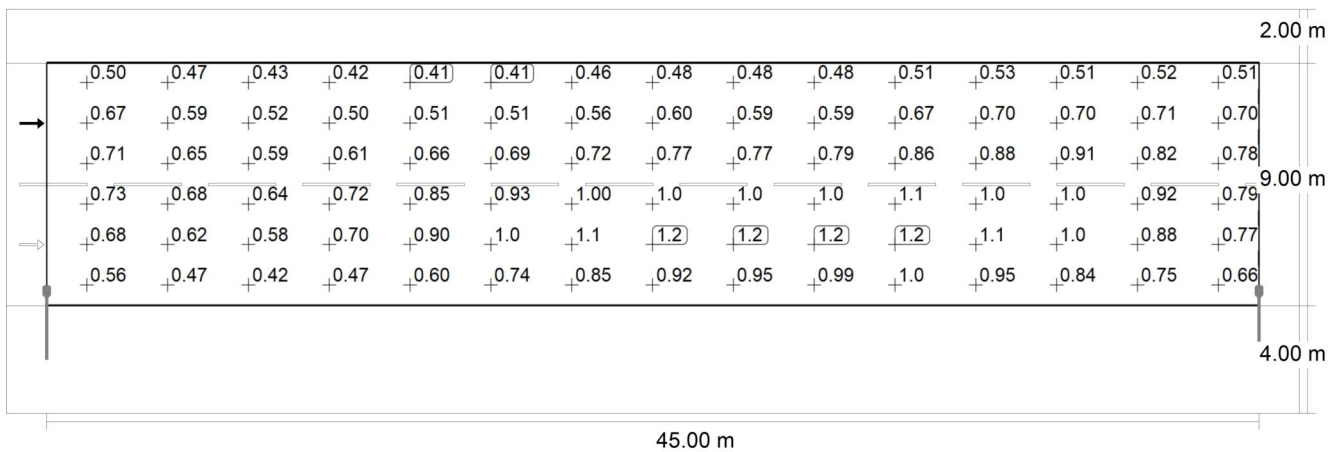
	L_{av}	L_{min}	L_{max}	g_1	g_2
Observer 2: Maintenance value, luminance with dry roadway	0.59 cd/m^2	0.33 cd/m^2	0.96 cd/m^2	0.56	0.34

Riigi tee nr 8

Sõidutee (M5)



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



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

Riigi tee nr 8

Sõidutee (M5)

m	1.500	4.500	7.500	10.500	13.500	16.500	19.500	22.500	25.500	28.500	31.500	34.500	37.500	40.500	43.500
12.250	0.50	0.47	0.43	0.42	0.41	0.41	0.46	0.48	0.48	0.48	0.51	0.53	0.51	0.52	0.51
10.750	0.67	0.59	0.52	0.50	0.51	0.51	0.56	0.60	0.59	0.59	0.67	0.70	0.70	0.71	0.70
9.250	0.71	0.65	0.59	0.61	0.66	0.69	0.72	0.77	0.77	0.79	0.86	0.88	0.91	0.82	0.78
7.750	0.73	0.68	0.64	0.72	0.85	0.93	1.00	1.04	1.01	1.03	1.07	1.05	1.03	0.92	0.79
6.250	0.68	0.62	0.58	0.70	0.90	1.04	1.13	1.18	1.18	1.17	1.20	1.14	1.01	0.88	0.77
4.750	0.56	0.47	0.42	0.47	0.60	0.74	0.85	0.92	0.95	0.99	1.01	0.95	0.84	0.75	0.66

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

	L _{av}	L _{min}	L _{max}	g ₁	g ₂
Observer 2: Luminance with new installation	0.74 cd/m ²	0.41 cd/m ²	1.20 cd/m ²	0.56	0.34