

# Studie verejného osvetlení - komunikace prujezdni 1

Installation :

Project number :

Customer :

Processed by : Ing. Eva Truneckova

Date : 19.12.2007

Project description:

Komunikace prujezdni s obousmernym provozem

## 1. Zadani:

sirka mezi vodicimi pruhy	8m
sirka jizdniho pruhu	4m
pocet jizdnich pruhu v jednom smeru	1
umisteni stozaru od hrany komunikace	1m

## 2. Pozadavky dle CSN EN 13201:

prumerna hodnota jasu	> 1cd/m <sup>2</sup>
celkova rovnomernost	> 0.4
podelna rovnomernost	> 0.6
cinictel oslneni	< 15%
osvetlenost okoli	> 0.5

## 3. Variantni zpracovani studie:

- vyska stozaru 8m, resp. 10m
- umisteni svitidla primo na sloupu, na vylozniku 1m, resp. na vylozniku 1.5m
- osvetlovaci soustava stridava, resp. oboustranna

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 1 Luminaire data

### 1.1 Thorn, CIVIC 2 150W HID 240V CL1 EFL + HIT-CE ... ()

#### 1.1.1 Data sheet

Manufacturer: Thorn

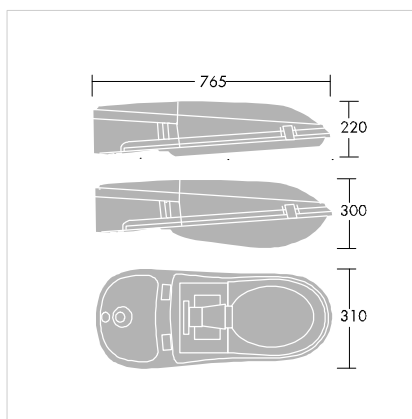
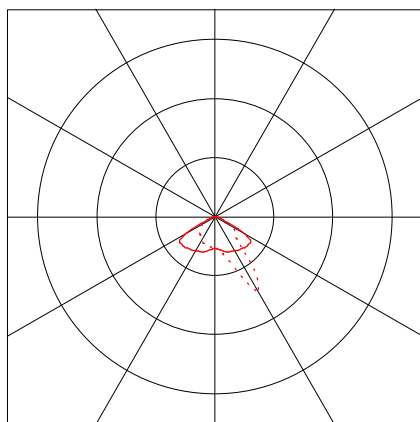
CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]

#### Luminaire data

Luminaires efficiency : 64.6% (A30)  
Control gear :  
System power : 170 W  
Length : 765 mm  
Width : 310 mm  
Height : 300 mm

#### Equipped with

Number of : 1  
Designation : HIT-CE  
Power : 150 W  
Colour :  
Luminous flux : 14000 lm

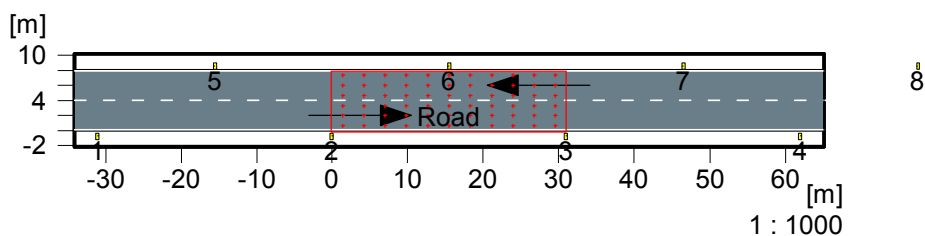


Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2 Komunikace prujezdni 1 var. 1

### 2.1 Description, Komunikace prujezdni 1 var. 1

#### 2.1.1 Floor plan



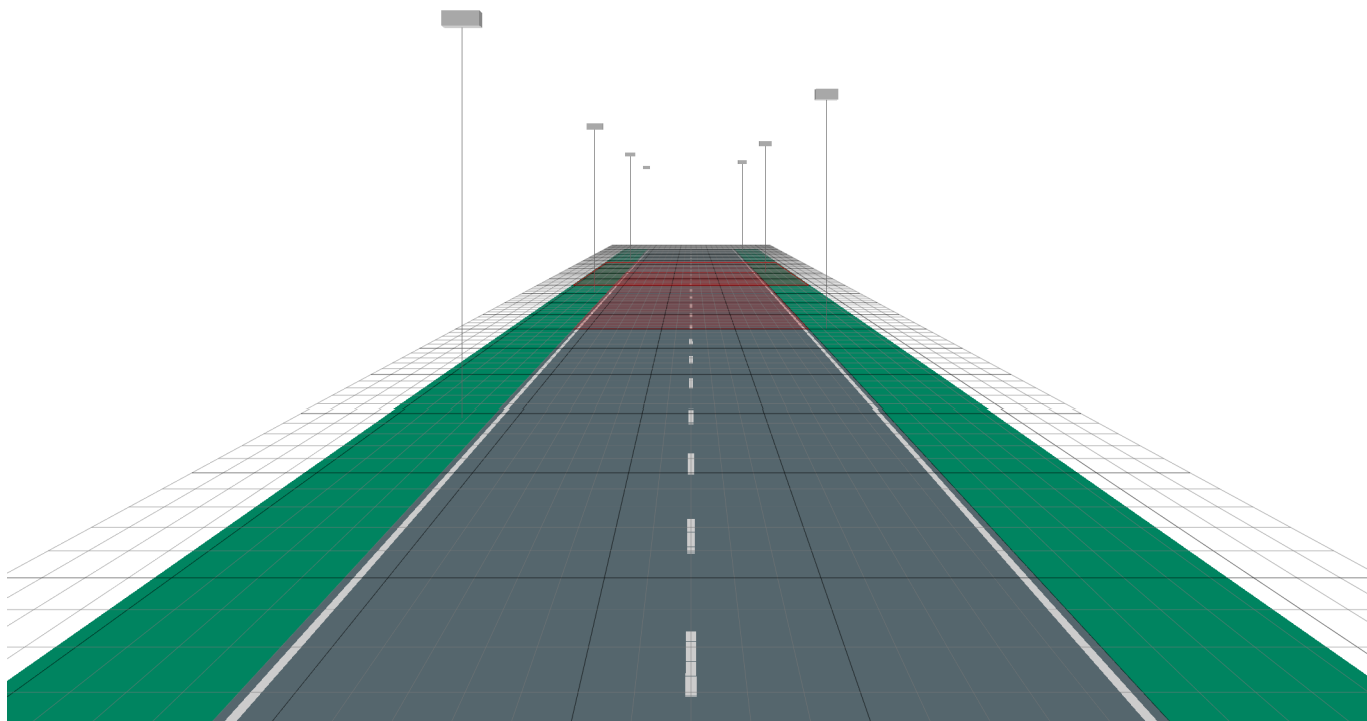
Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	: 8.00 m
No. of lanes	: 2	Luminaire spacing	: 31.00 m
Road surface category	: R3	Luminaires - outreach	: -0.60 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2.1 Description, Komunikace prujezdni 1 var. 1

### 2.1.2 3D view, View from the left

---



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2 Komunikace pruhovní 1 var. 1

### 2.2 Summary, Komunikace pruhovní 1 var. 1

#### 2.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.00 m
No. of lanes	: 2	Luminaire spacing	(a): 31.00 m
Road surface category	: R3	Luminaires - outreach	(u): -0.60 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.05 cd/m<sup>2</sup>  
U0 (min/average) : 0.53

Observer location 2 : x=106.50m, y=6.00m, z=1.50m  
Average : 1.05 cd/m<sup>2</sup>  
U0 (min/average) : 0.53

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.63  
UI (B2: x = 106.50, y = 6.00, z = 1.50) : 0.63

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **2 Komunikace prujezdni 1 var. 1**

### **2.2 Summary, Komunikace prujezdni 1 var. 1**

#### **2.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 2.10 %
SR	: 0.52

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2 Komunikace prujezdni 1 var. 1

### 2.3 Calculation results, Komunikace prujezdni 1 var. 1

#### 2.3.1 Table, Road (L)

[m]	0.85	1.09	1.23	1.26	1.12	0.93	1.07	0.99	0.78	0.58	0.57
7.33	└	└	└	└	└	└	└	└	└	└	└
6.00	1.01	1.23	1.27	1.24	1.14	0.94	1.07	1.02	1.01	0.9	0.8
	└	└	└	└	└	└	└	└	└	└	└
4.67	1.17	<b>[1.31]</b>	1.14	1.18	1.2	1.06	1.17	1.04	1.07	1.2	1.07
	└	└	└	└	└	└	└	└	└	└	└
3.33	1.19	1.14	1.05	1.14	1.13	0.99	1.2	1.17	1.11	1.2	1.18
	└	└	└	└	└	└	└	└	└	└	└
2.00	1.03	1.08	1.02	0.98	0.8	0.76	1.05	1.2	1.19	1.19	1.04
	└	└	└	└	└	└	└	└	└	└	└
0.67	1.04	1.15	0.88	0.66	<b>(0.55)</b>	0.64	0.93	1.11	1.23	1.24	1.04
	└	└	└	└	└	└	└	└	└	└	└
	1.41	4.23	7.05	9.86	12.68	15.50	18.32	21.14	23.95	26.77	29.59
	Luminance [cd/m2]										

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 2.3 Calculation results, Komunikace prujezdni 1 var. 1

### 2.3.2 Table, Road (L)

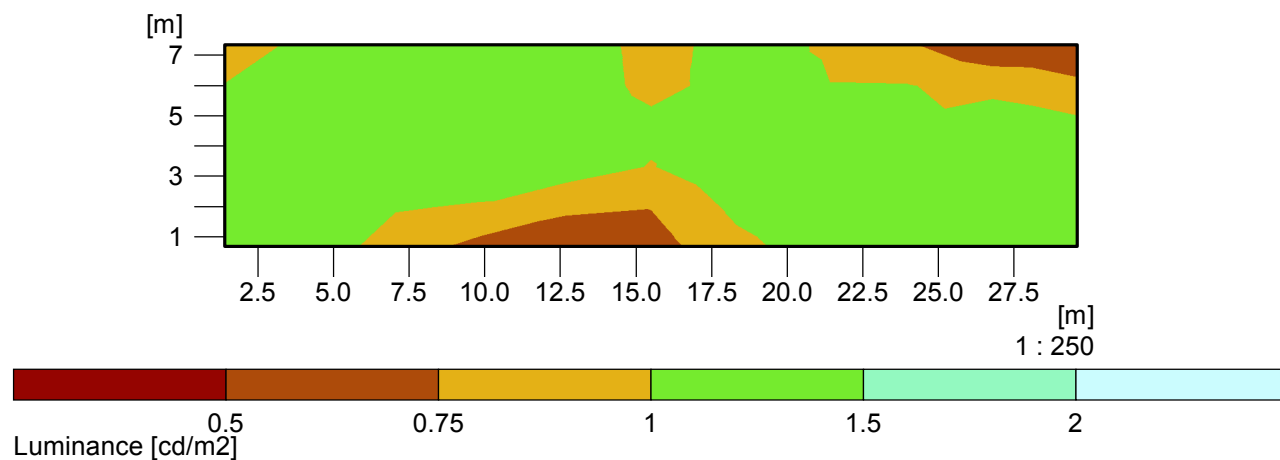
[m]	1.04	1.24	1.23	1.11	0.93	0.64	<b>(0.55)</b>	0.66	0.88	1.15	1.04
7.33	1.04	1.19	1.19	1.2	1.05	0.76	0.8	0.98	1.02	1.08	1.03
6.00	1.18	1.2	1.11	1.17	1.2	0.99	1.13	1.14	1.05	1.14	1.19
4.67	1.07	1.2	1.07	1.04	1.17	1.06	1.2	1.18	1.14	<b>[1.31]</b>	1.17
3.33	0.8	0.9	1.01	1.02	1.07	0.94	1.14	1.24	1.27	1.23	1.01
2.00	0.57	0.58	0.78	0.99	1.07	0.93	1.12	1.26	1.23	1.09	0.85
0.67	1.41	4.23	7.05	9.86	12.68	15.50	18.32	21.14	23.95	26.77	29.59
	Luminance [cd/m2]										
	[m]										

Observer location 2	: x = 107, y = 6, z = 1.5
Average luminance	Lav : 1.05 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.55 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.53
Threshold increment	TI : 2.1 %
Longitudinal uniformity UI	Llmin/Llmax : 0.63

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2.3 Calculation results, Komunikace prujezdni 1 var. 1

### 2.3.3 Pseudo colours, Road (L)

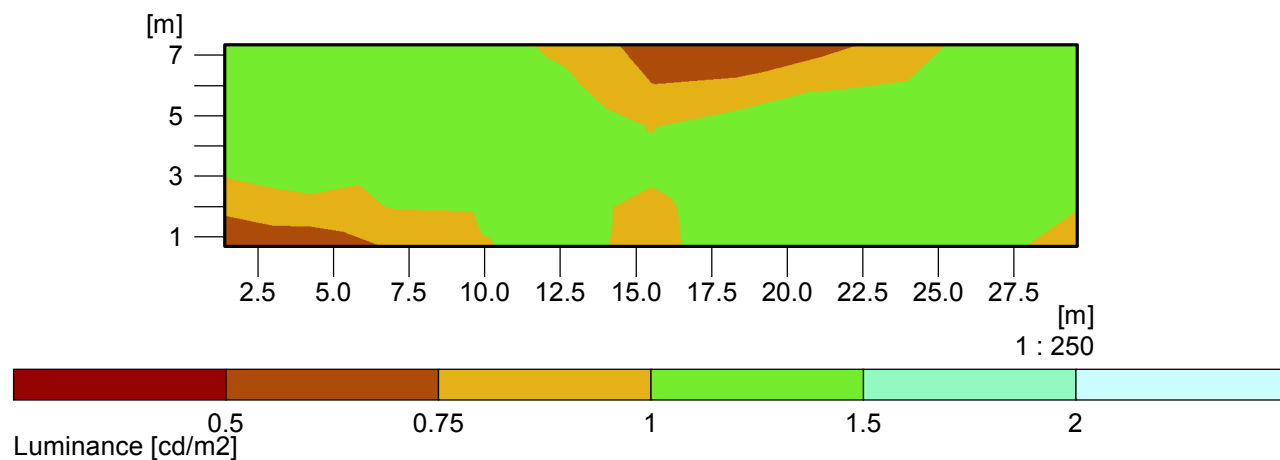


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.05 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.55 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.53
Threshold increment	TI : 2.1 %
Longitudinal uniformity UI	Lmin/Llmax : 0.63

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 2.3 Calculation results, Komunikace prujezdni 1 var. 1

### 2.3.4 Pseudo colours, Road (L)



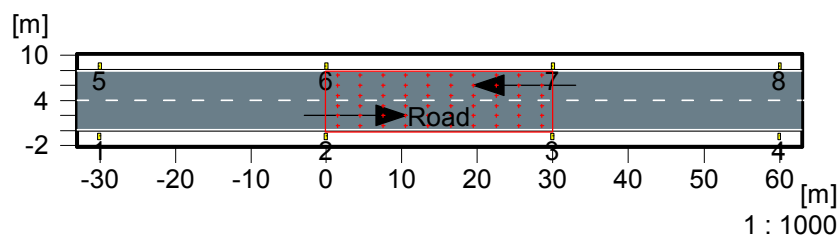
Observer location 2	: x = 107, y = 6, z = 1.5
Average luminance	Lav : 1.05 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.55 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.53
Threshold increment	TI : 2.1 %
Longitudinal uniformity UI	Lmin/Llmax : 0.63

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 3 Komunikace prujezdni 1 var. 2

#### 3.1 Description, Komunikace prujezdni 1 var. 2

##### 3.1.1 Floor plan



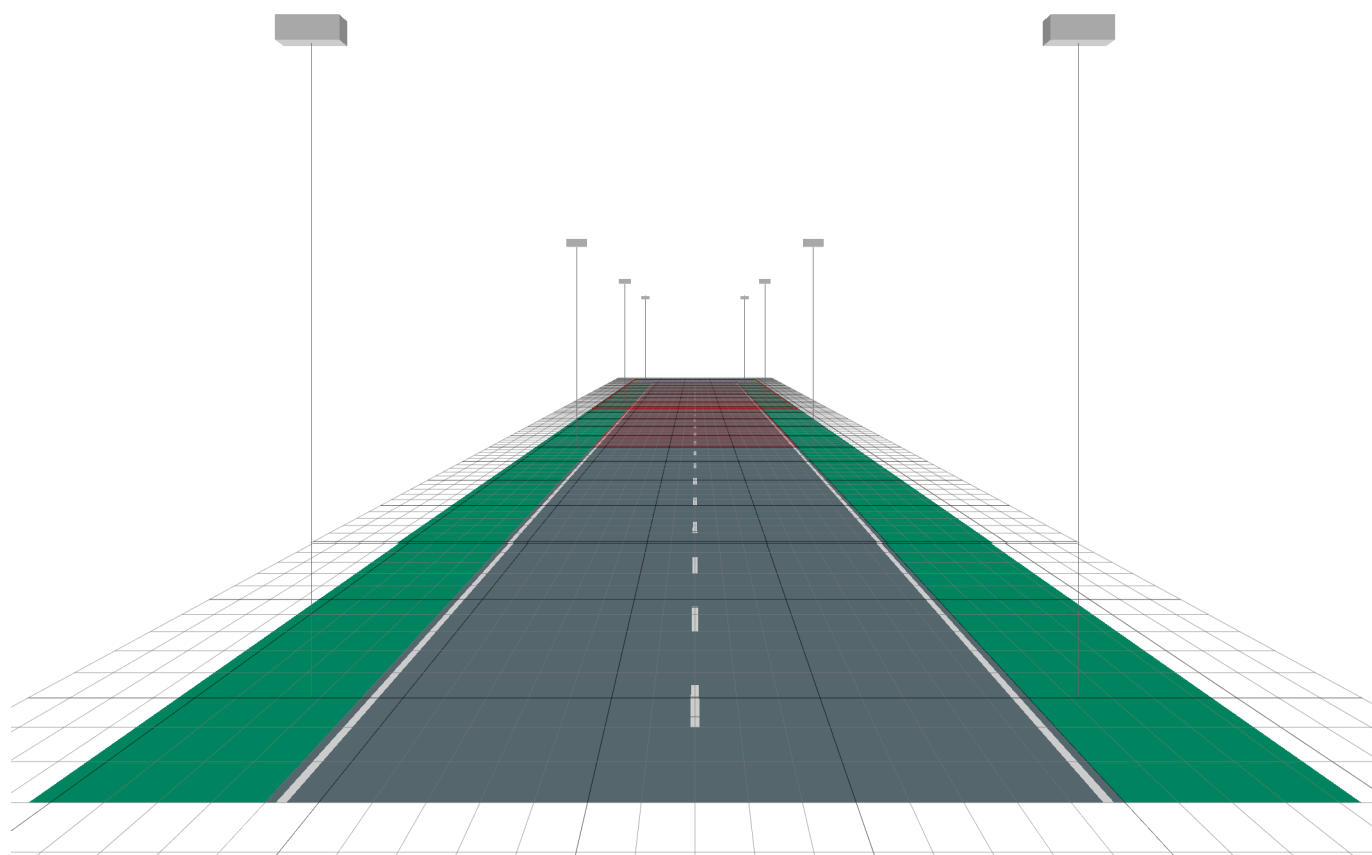
Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	: 8.00 m	photometric centre height	: 8.00 m
No. of lanes	: 2	Luminaire spacing	: 30.00 m
Road surface category	: R3	Luminaires - outreach	: -0.60 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 3.1 Description, Komunikace prujezdni 1 var. 2

#### 3.1.2 3D view, View from the left

---



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

### 3 Komunikace pruhovní 1 var. 2

#### 3.2 Summary, Komunikace pruhovní 1 var. 2

##### 3.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.00 m
No. of lanes	: 2	Luminaire spacing	(a): 30.00 m
Road surface category	: R3	Luminaires - outreach	(u): -0.60 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.61

Observer location 2 : x=90.00m, y=6.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.61

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.60  
UI (B2: x = 90.00, y = 6.00, z = 1.50) : 0.60

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### **3 Komunikace prujezdni 1 var. 2**

#### **3.2 Summary, Komunikace prujezdni 1 var. 2**

##### **3.2.1 Result overview, Road**

###### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 4.26 %
SR	: 0.52

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

### 3 Komunikace prujezdni 1 var. 2

#### 3.3 Calculation results, Komunikace prujezdni 1 var. 2

##### 3.3.1 Table, Road (L)

[m]										
7.33	(0.66)	0.68	0.78	0.87	0.97	1.33	1.48	1.31	0.98	0.74
6.00	0.94	0.96	0.92	0.88	0.94	1.18	1.36	1.39	1.33	1.02
4.67	1.4	1.26	0.88	0.78	0.81	1.01	1.18	1.38	[1.7]	1.51
3.33	1.39	1.25	0.87	0.76	0.8	0.98	1.19	1.39	1.68	1.5
2.00	0.93	0.94	0.89	0.83	0.88	1.12	1.33	1.39	1.31	1
0.67	(0.66)	0.68	0.78	0.88	0.97	1.31	1.48	1.29	0.98	0.74
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m2]									
	[m]									

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.66 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.61
Threshold increment	TI : 4.3 %
Longitudinal uniformity UI	Llmin/Llmax : 0.6

Object : Studie verejného osvetlení - komunikace pruhovní 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

### 3.3 Calculation results, Komunikace pruhovní 1 var. 2

#### 3.3.2 Table, Road (L)

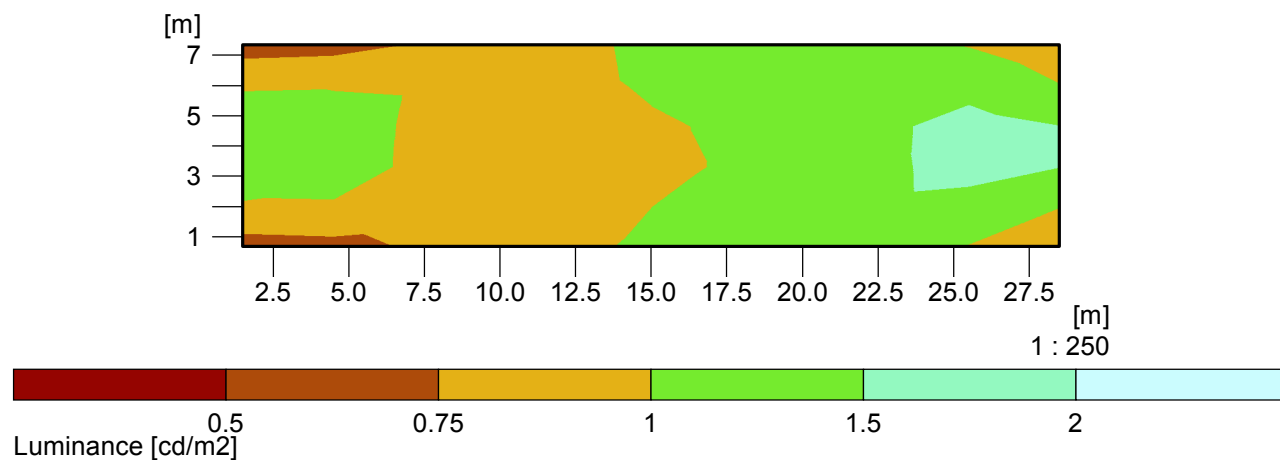
[m]	0.74	0.98	1.29	1.48	1.31	0.97	0.88	0.78	0.68	<b>(0.66)</b>
7.33	└	└	└	└	└	└	└	└	└	└
6.00	1	1.31	1.39	1.33	1.12	0.88	0.83	0.89	0.94	0.93
	└	└	└	└	└	└	└	└	└	└
4.67	1.5	1.68	1.39	1.19	0.98	0.8	0.76	0.87	1.25	1.39
	└	└	└	└	└	└	└	└	└	└
3.33	1.51	<b>[1.7]</b>	1.38	1.18	1.01	0.81	0.78	0.88	1.26	1.4
	└	└	└	└	└	└	└	└	└	└
2.00	1.02	1.33	1.39	1.36	1.18	0.94	0.88	0.92	0.96	0.94
	└	└	└	└	└	└	└	└	└	└
0.67	0.74	0.98	1.31	1.48	1.33	0.97	0.87	0.78	0.68	<b>(0.66)</b>
	└	└	└	└	└	└	└	└	└	└
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m <sup>2</sup> ]									
	[m]									

Observer location 2	: x = 90, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.66 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.61
Threshold increment	TI : 4.3 %
Longitudinal uniformity UI	Llmin/Llmax : 0.6

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 3.3 Calculation results, Komunikace prujezdni 1 var. 2

#### 3.3.3 Pseudo colours, Road (L)

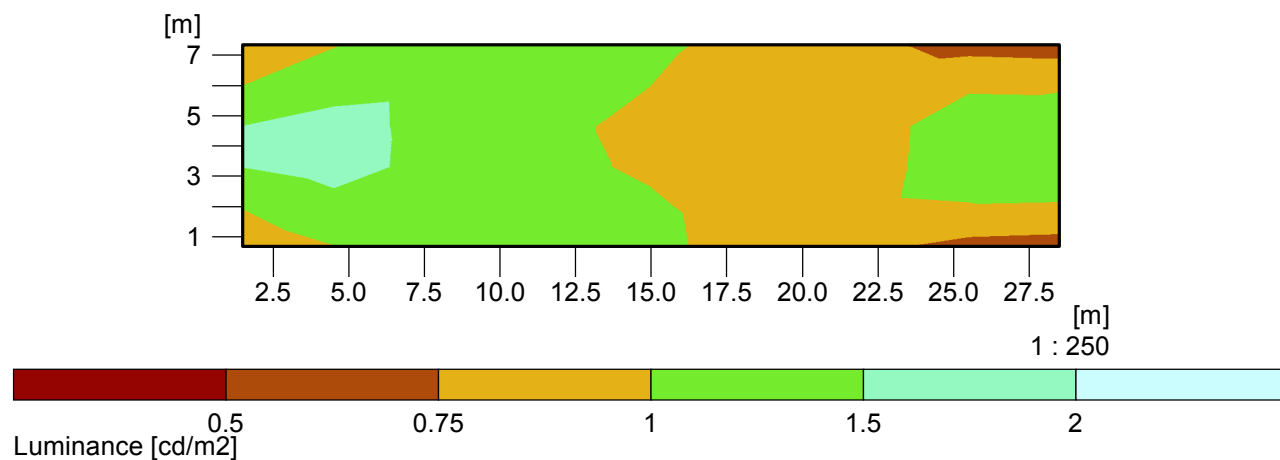


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.66 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.61
Threshold increment	TI : 4.3 %
Longitudinal uniformity UI	Lmin/Llmax : 0.6

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 3.3 Calculation results, Komunikace prujezdni 1 var. 2

#### 3.3.4 Pseudo colours, Road (L)



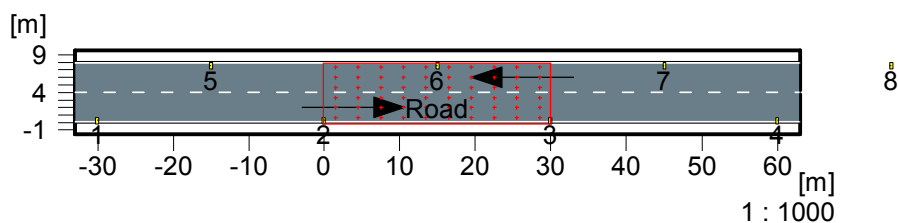
Observer location 2	: x = 90, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.66 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.61
Threshold increment	TI : 4.3 %
Longitudinal uniformity UI	Lmin/Llmax : 0.6

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 4 Komunikace prujezdni 1 var. 3

### 4.1 Description, Komunikace prujezdni 1 var. 3

#### 4.1.1 Floor plan

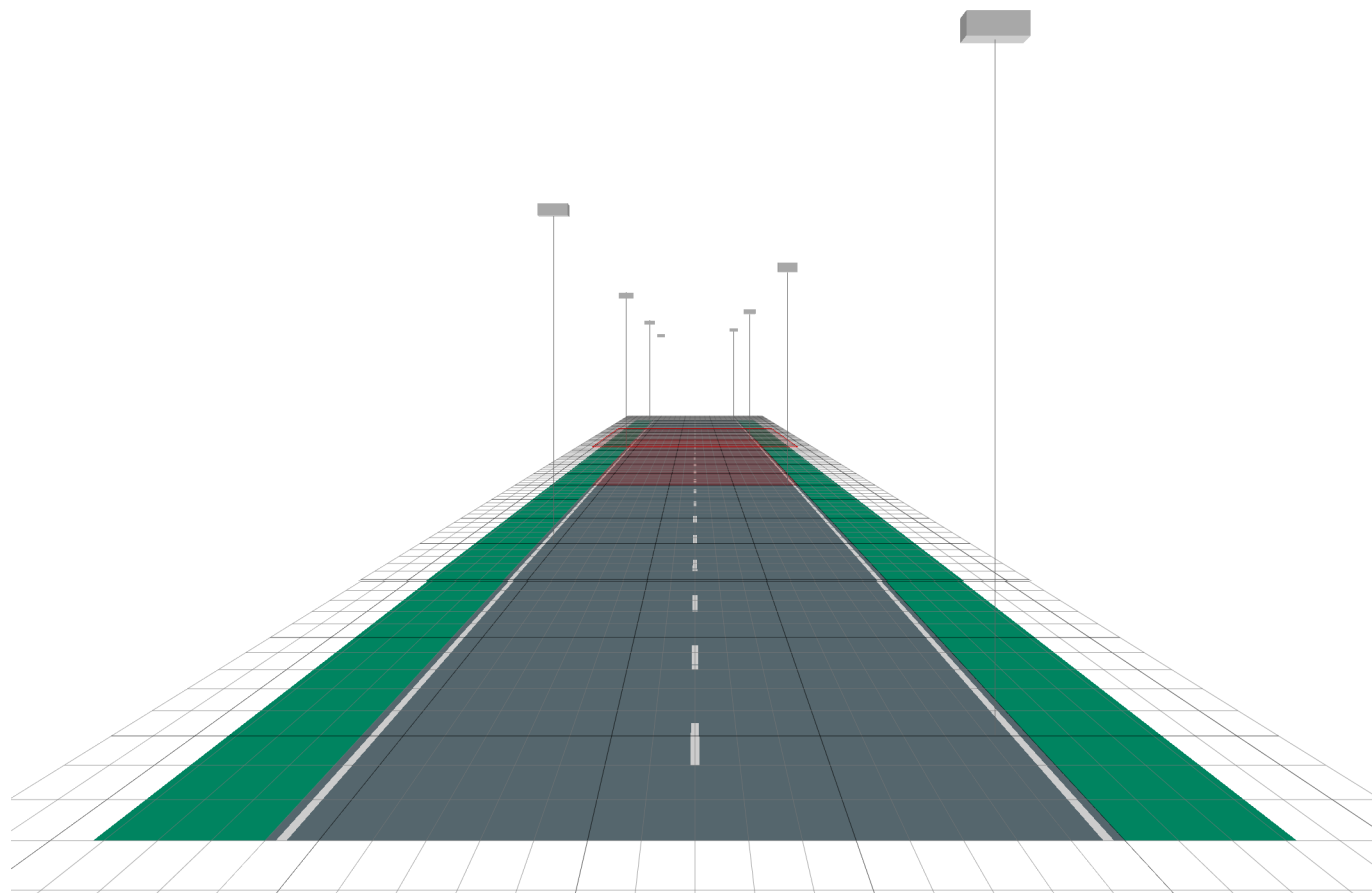


Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	: 8.50 m
No. of lanes	: 2	Luminaire spacing	: 30.00 m
Road surface category	: R3	Luminaires - outreach	: 0.40 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 4.1 Description, Komunikace prujezdni 1 var. 3

### 4.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 4 Komunikace pruhovní 1 var. 3

### 4.2 Summary, Komunikace pruhovní 1 var. 3

#### 4.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.50 m
No. of lanes	: 2	Luminaire spacing	(a): 30.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.40 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.7

Observer location 2 : x=105.00m, y=6.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.7

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.70  
UI (B2: x = 105.00, y = 6.00, z = 1.50) : 0.70

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **4 Komunikace prujezdni 1 var. 3**

### **4.2 Summary, Komunikace prujezdni 1 var. 3**

#### **4.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B2: y=6.00m)	: 2.43 %
SR	: 0.6

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 4 Komunikace prujezdni 1 var. 3

### 4.3 Calculation results, Komunikace prujezdni 1 var. 3

#### 4.3.1 Table, Road (L)

---

[m]	0.89	1.07	1.12	1	0.87	0.85	0.88	0.87	0.75	(0.73)
7.33	1.3	[1.36]	1.17	1.03	0.9	0.89	0.92	0.98	1.11	1.13
6.00	1.32	1.2	1.05	1.07	0.99	1.01	1	1	1.15	1.23
4.67	1.07	1.03	1.01	1.13	1.18	1.24	1.16	1.04	1.07	1.02
3.33	0.92	0.95	1	1.1	1.09	1.23	1.31	1.14	1.04	0.92
2.00	0.88	0.93	0.91	0.78	0.74	0.93	1.09	1.14	1.03	0.9
0.67										
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m2]									

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.73 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.7
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.7

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

### 4.3 Calculation results, Komunikace prujezdni 1 var. 3

#### 4.3.2 Table, Road (L)

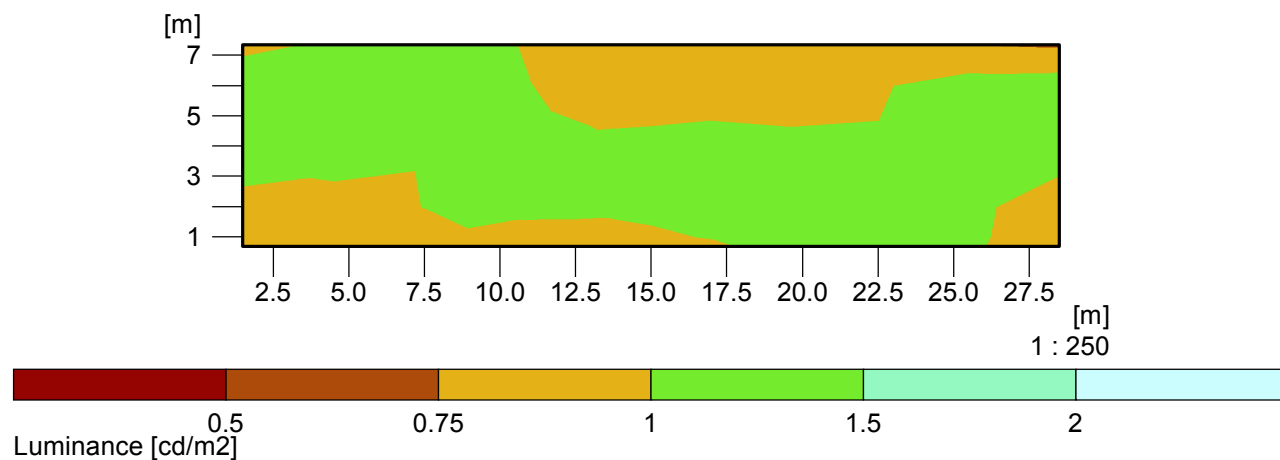
[m]	0.9	1.03	1.14	1.09	0.93	0.74	0.78	0.91	0.93	0.88
7.33	0.92	1.04	1.14	1.31	1.23	1.09	1.1	1	0.95	0.92
6.00	1.02	1.07	1.04	1.16	1.24	1.18	1.13	1.01	1.03	1.07
4.67	1.23	1.15	1	1	1.01	0.99	1.07	1.05	1.2	1.32
3.33	1.13	1.11	0.98	0.92	0.89	0.9	1.03	1.17	<b>[1.36]</b>	1.3
2.00	<b>(0.73)</b>	0.75	0.87	0.88	0.85	0.87	1	1.12	1.07	0.89
0.67										
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m2]									

Observer location 2	: x = 105, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.73 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.7
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.7

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 4.3 Calculation results, Komunikace prujezdni 1 var. 3

### 4.3.3 Pseudo colours, Road (L)

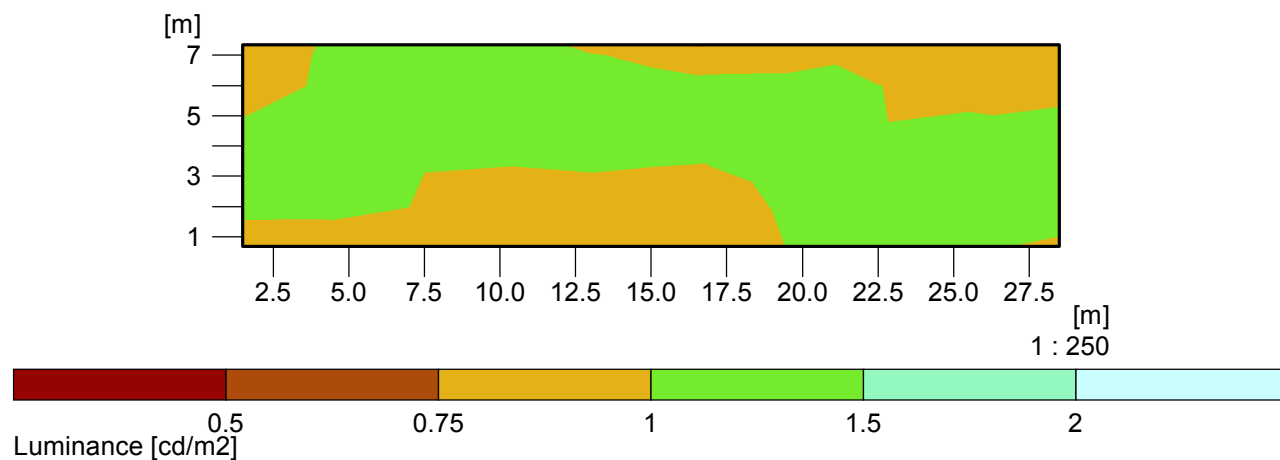


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.73 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.7
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.7

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 4.3 Calculation results, Komunikace prujezdni 1 var. 3

#### 4.3.4 Pseudo colours, Road (L)



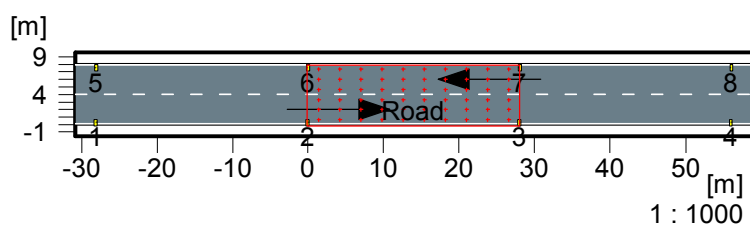
Observer location 2	: x = 105, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.73 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.7
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.7

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 5 Komunikace prujezdni 1 var. 4

### 5.1 Description, Komunikace prujezdni 1 var. 4

#### 5.1.1 Floor plan

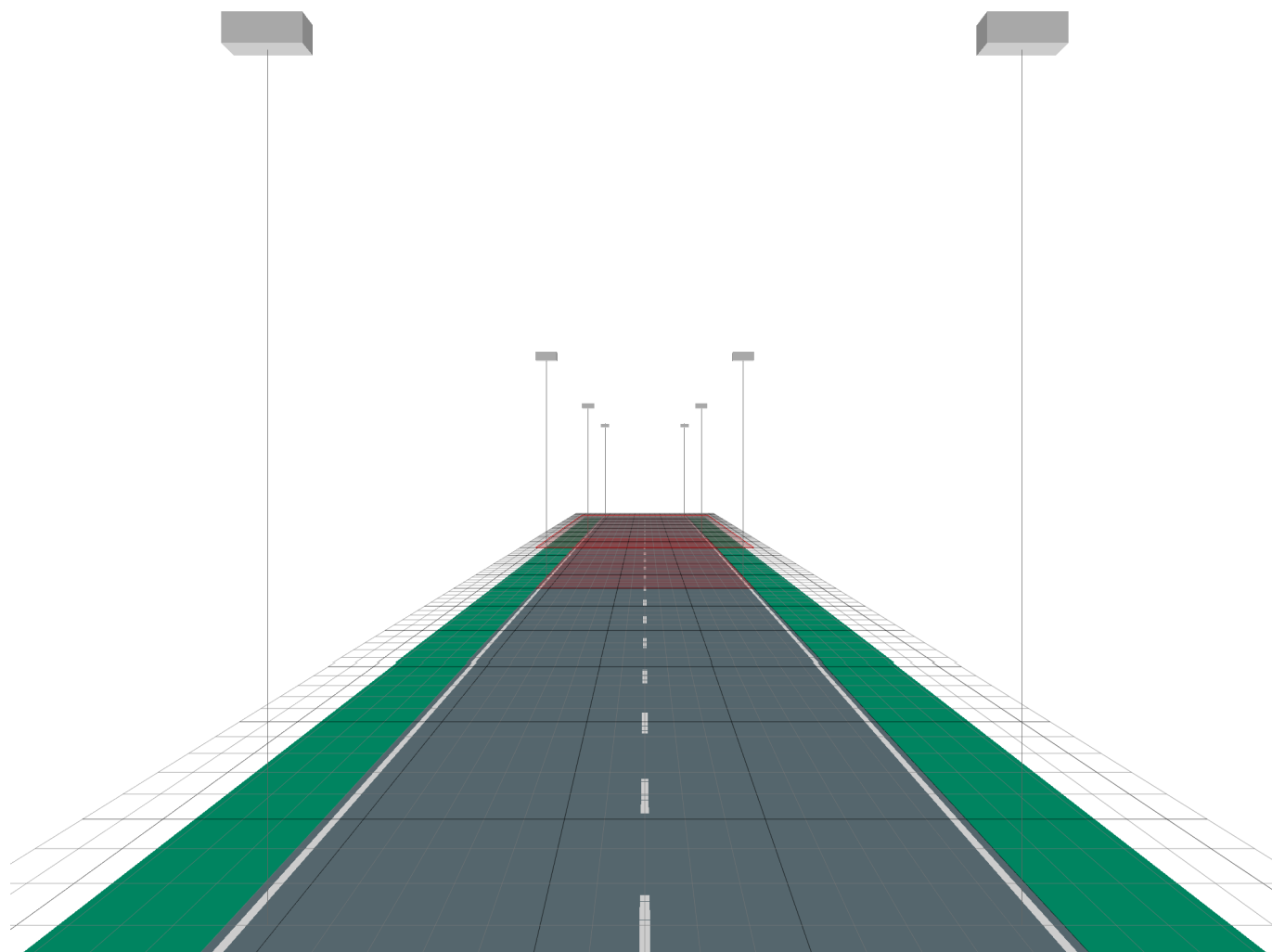


Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	: 8.00 m	photometric centre height	: 8.50 m
No. of lanes	: 2	Luminaire spacing	: 28.00 m
Road surface category	: R3	Luminaires - outreach	: 0.40 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 5.1 Description, Komunikace prujezdni 1 var. 4

### 5.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 5 Komunikace pruhovní 1 var. 4

### 5.2 Summary, Komunikace pruhovní 1 var. 4

#### 5.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.50 m
No. of lanes	: 2	Luminaire spacing	(a): 28.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.40 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.1 cd/m<sup>2</sup>  
U0 (min/average) : 0.65

Observer location 2 : x=88.00m, y=6.00m, z=1.50m  
Average : 1.1 cd/m<sup>2</sup>  
U0 (min/average) : 0.65

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.62  
UI (B2: x = 88.00, y = 6.00, z = 1.50) : 0.62

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **5 Komunikace prujezdni 1 var. 4**

### **5.2 Summary, Komunikace prujezdni 1 var. 4**

#### **5.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 3.20 %
SR	: 0.61

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 5 Komunikace prujezdni 1 var. 4

### 5.3 Calculation results, Komunikace prujezdni 1 var. 4

#### 5.3.1 Table, Road (L)

---

[m]	(0.71)	0.8	0.86	0.82	1	1.19	1.23	1.24	1.03	0.78
7.33	1.07	1.09	0.92	0.88	1.09	1.25	1.29	1.36	1.38	1.14
6.00	1.25	1.14	0.91	0.89	1.05	1.23	1.21	1.33	[1.48]	1.34
4.67	1.24	1.13	0.88	0.86	1.04	1.21	1.2	1.35	[1.48]	1.34
3.33	1.07	1.09	0.92	0.87	1.06	1.22	1.27	1.37	1.39	1.14
2.00	0.74	0.84	0.89	0.86	1.05	1.24	1.27	1.27	1.05	0.8
0.67	1.40	4.20	7.00	9.80	12.60	15.40	18.20	21.00	23.80	26.60
	Luminance [cd/m2]									

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.1 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.71 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.65
Threshold increment	TI : 3.2 %
Longitudinal uniformity UI	Llmin/Llmax : 0.62

Object : Studie verejného osvetlení - komunikace pruhovní 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 5.3 Calculation results, Komunikace pruhovní 1 var. 4

### 5.3.2 Table, Road (L)

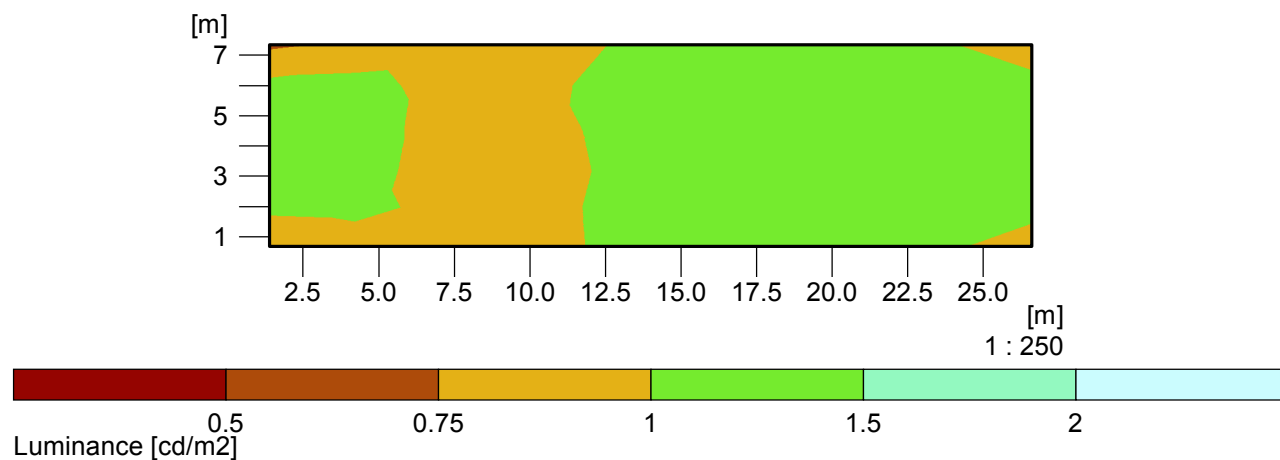
[m]	0.8	1.05	1.27	1.27	1.24	1.05	0.86	0.89	0.84	0.74
7.33	1.14	1.39	1.37	1.27	1.22	1.06	0.87	0.92	1.09	1.07
6.00	1.34	<b>[1.48]</b>	1.35	1.2	1.21	1.04	0.86	0.88	1.13	1.24
4.67	1.34	<b>[1.48]</b>	1.33	1.21	1.23	1.05	0.89	0.91	1.14	1.25
3.33	1.14	1.38	1.36	1.29	1.25	1.09	0.88	0.92	1.09	1.07
2.00	0.78	1.03	1.24	1.23	1.19	1	0.82	0.86	0.8	<b>(0.71)</b>
0.67	1.40	4.20	7.00	9.80	12.60	15.40	18.20	21.00	23.80	26.60
	Luminance [cd/m <sup>2</sup> ]									

Observer location 2	: x = 88, y = 6, z = 1.5
Average luminance	Lav : 1.1 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.71 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.65
Threshold increment	TI : 3.2 %
Longitudinal uniformity UI	Llmin/Llmax : 0.62

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 5.3 Calculation results, Komunikace prujezdni 1 var. 4

### 5.3.3 Pseudo colours, Road (L)

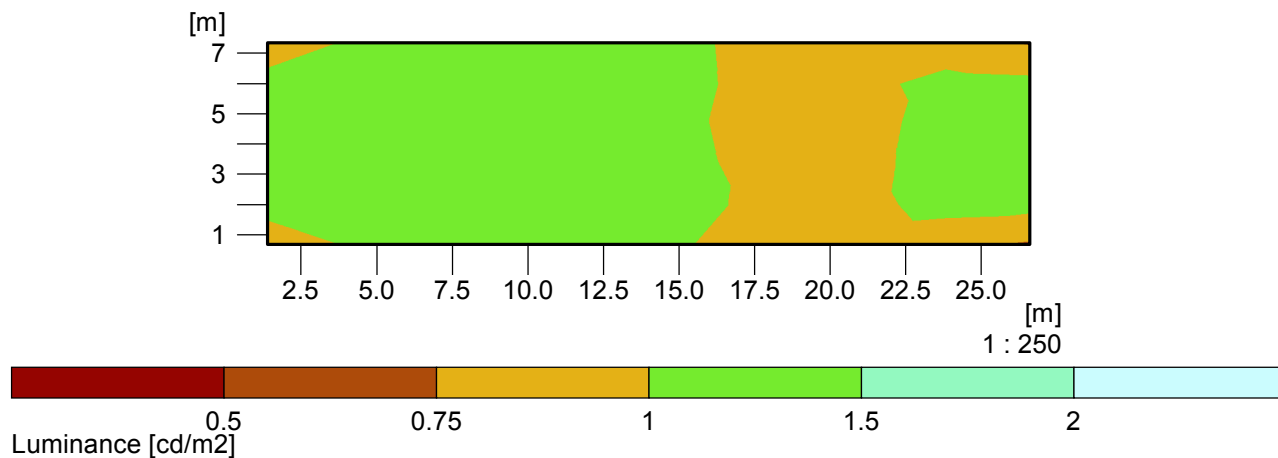


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.1 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.71 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.65
Threshold increment	TI : 3.2 %
Longitudinal uniformity UI	Lmin/Llmax : 0.62

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 5.3 Calculation results, Komunikace prujezdni 1 var. 4

#### 5.3.4 Pseudo colours, Road (L)



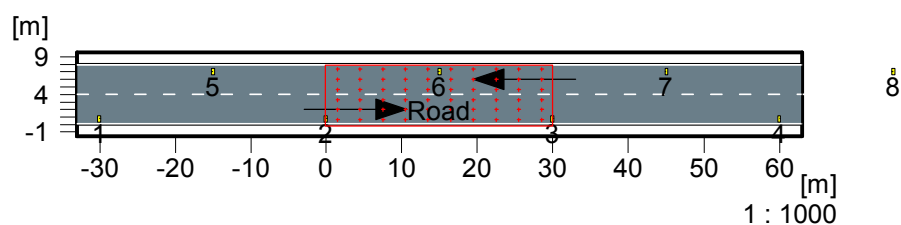
Observer location 2	: x = 88, y = 6, z = 1.5
Average luminance	Lav : 1.1 cd/m²
Minimum luminance	Lmin : 0.71 cd/m²
Overall uniformity U0	Lmin/Lm : 0.65
Threshold increment	TI : 3.2 %
Longitudinal uniformity UI	Lmin/Llmax : 0.62

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6 Komunikace prujezdni 1 var. 5

### 6.1 Description, Komunikace prujezdni 1 var. 5

#### 6.1.1 Floor plan



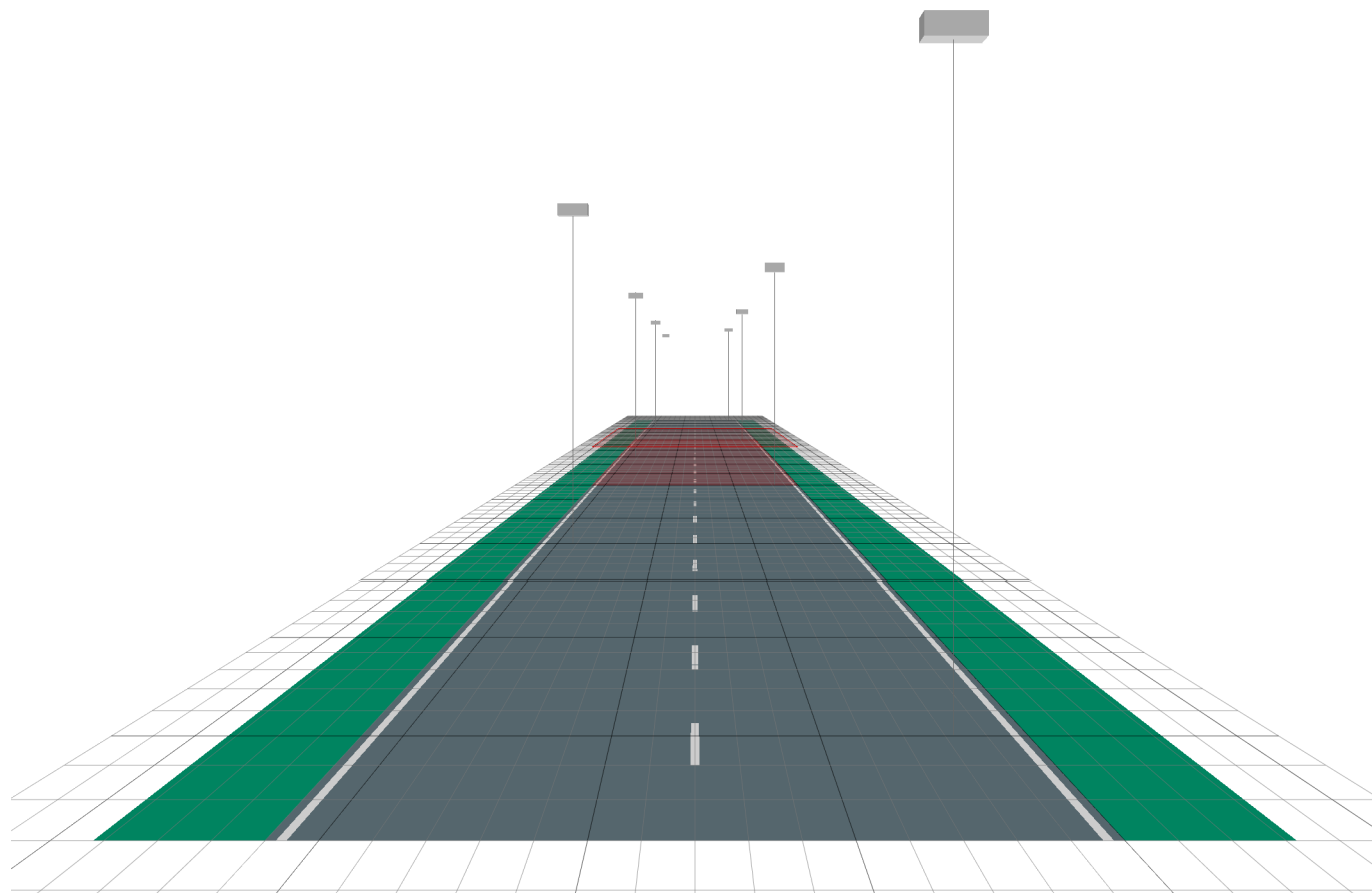
Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	: 8.50 m
No. of lanes	: 2	Luminaire spacing	: 30.00 m
Road surface category	: R3	Luminaires - outreach	: 0.90 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6.1 Description, Komunikace prujezdni 1 var. 5

### 6.1.2 3D view, View from the left

---



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6 Komunikace pruhovní 1 var. 5

### 6.2 Summary, Komunikace pruhovní 1 var. 5

#### 6.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.50 m
No. of lanes	: 2	Luminaire spacing	(a): 30.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.90 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.74

Observer location 2 : x=105.00m, y=6.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.74

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.67  
UI (B2: x = 105.00, y = 6.00, z = 1.50) : 0.67

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **6 Komunikace prujezdni 1 var. 5**

### **6.2 Summary, Komunikace prujezdni 1 var. 5**

#### **6.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 2.44 %
SR	: 0.64

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6 Komunikace prujezdni 1 var. 5

### 6.3 Calculation results, Komunikace prujezdni 1 var. 5

#### 6.3.1 Table, Road (L)

---

[m]	0.9	1.08	1.06	0.93	0.81	0.79	0.83	0.86	0.81	(0.76)
7.33	└	└	└	└	└	└	└	└	└	└
6.00	1.33	[1.34]	1.12	0.98	0.85	0.86	0.89	0.95	1.11	1.17
	└	└	└	└	└	└	└	└	└	└
4.67	1.31	1.19	1.03	1.03	0.96	0.99	0.98	0.99	1.11	1.21
	└	└	└	└	└	└	└	└	└	└
3.33	1.06	1.02	0.99	1.09	1.15	1.23	1.14	1.03	1.05	0.99
	└	└	└	└	└	└	└	└	└	└
2.00	0.9	0.93	0.98	1.12	1.15	1.29	1.32	1.12	1	0.89
	└	└	└	└	└	└	└	└	└	└
0.67	0.83	0.88	0.91	0.85	0.79	0.96	1.12	1.1	0.96	0.85
	└	└	└	└	└	└	└	└	└	└
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m2]									

[m]

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.76 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.74
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.67

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 6.3 Calculation results, Komunikace prujezdni 1 var. 5

### 6.3.2 Table, Road (L)

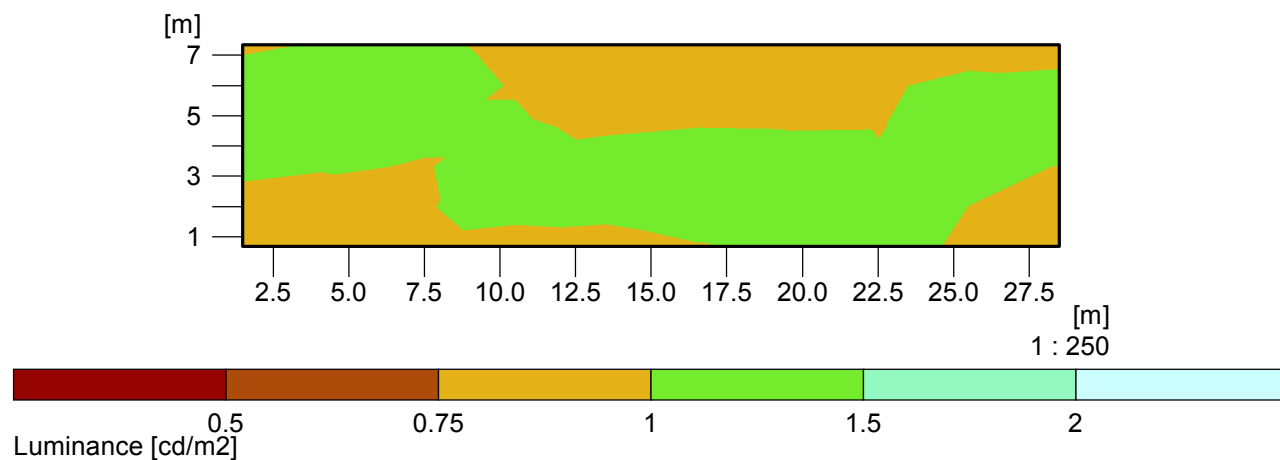
[m]	0.85	0.96	1.1	1.12	0.96	0.79	0.85	0.91	0.88	0.83
7.33	0.89	1	1.12	1.32	1.29	1.15	1.12	0.98	0.93	0.9
6.00	0.99	1.05	1.03	1.14	1.23	1.15	1.09	0.99	1.02	1.06
4.67	1.21	1.11	0.99	0.98	0.99	0.96	1.03	1.03	1.19	1.31
3.33	1.17	1.11	0.95	0.89	0.86	0.85	0.98	1.12	<b>[1.34]</b>	1.33
2.00	<b>(0.76)</b>	0.81	0.86	0.83	0.79	0.81	0.93	1.06	1.08	0.9
0.67										
	1.50	4.50	7.50	10.50	13.50	16.50	19.50	22.50	25.50	28.50
	Luminance [cd/m2]									

Observer location 2	: x = 105, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.76 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.74
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.67

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6.3 Calculation results, Komunikace prujezdni 1 var. 5

### 6.3.3 Pseudo colours, Road (L)

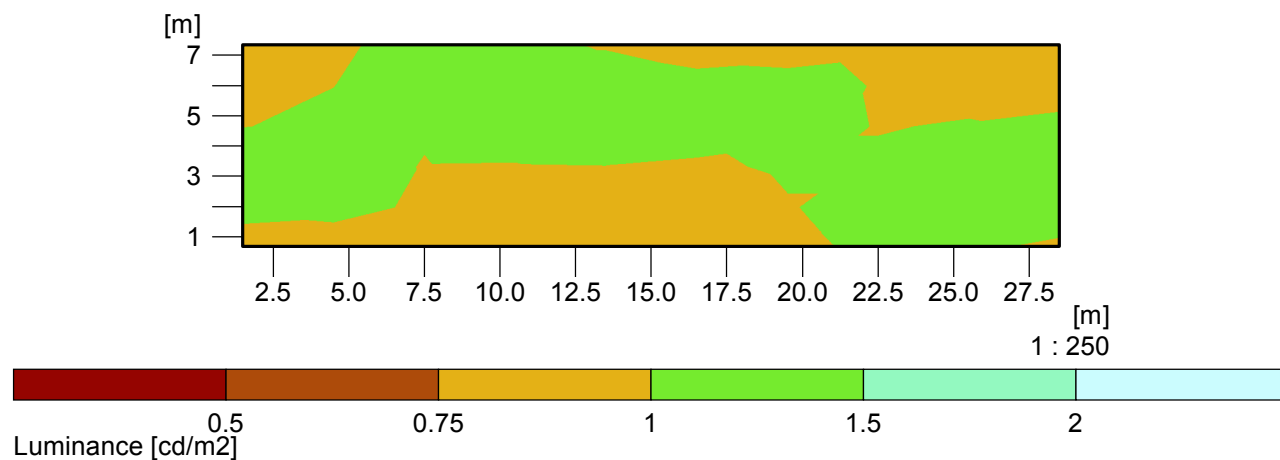


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m²
Minimum luminance	Lmin : 0.76 cd/m²
Overall uniformity U0	Lmin/Lm : 0.74
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.67

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 6.3 Calculation results, Komunikace prujezdni 1 var. 5

### 6.3.4 Pseudo colours, Road (L)



Observer location 2	: x = 105, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.76 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.74
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.67

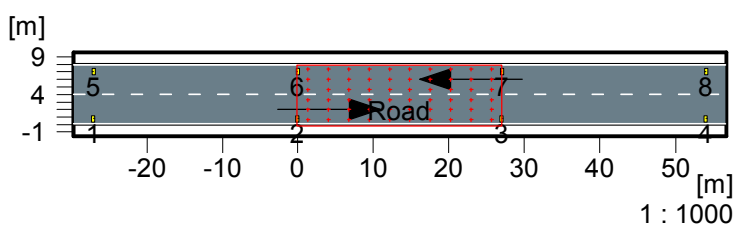
Object : Studie verejného osvetlení - komunikace pruhzdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 7 Komunikace pruhzdni 1 var. 6

### 7.1 Description, Komunikace pruhzdni 1 var. 6

#### 7.1.1 Floor plan

---



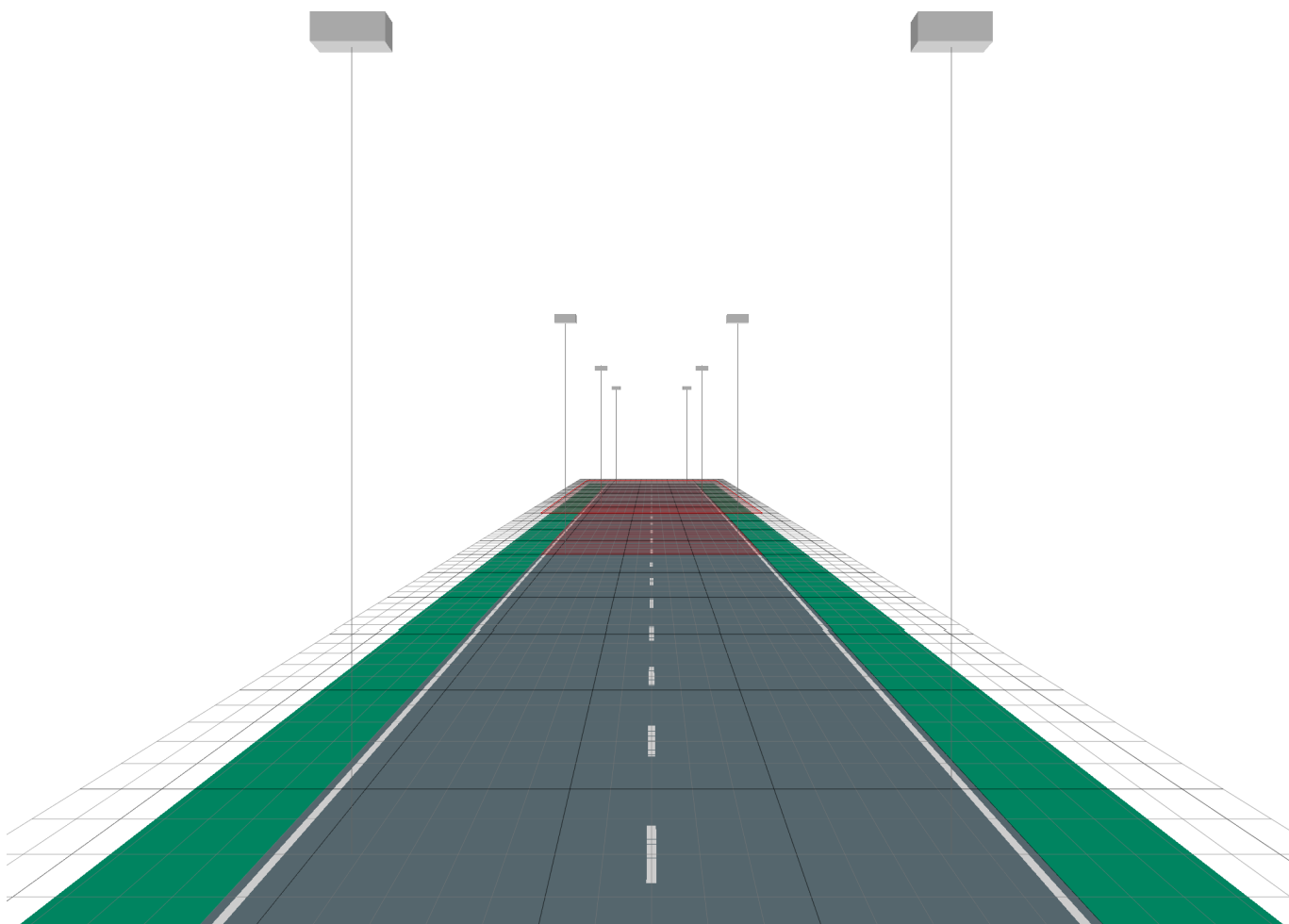
---

Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	: 8.00 m	photometric centre height	: 8.50 m
No. of lanes	: 2	Luminaire spacing	: 27.00 m
Road surface category	: R3	Luminaires - outreach	: 0.90 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 7.1 Description, Komunikace prujezdni 1 var. 6

### 7.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovazní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 7 Komunikace pruhovazní 1 var. 6

### 7.2 Summary, Komunikace pruhovazní 1 var. 6

#### 7.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	8.50 m
No. of lanes	: 2	Luminaire spacing	(a): 27.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.90 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.13 cd/m<sup>2</sup>  
U0 (min/average) : 0.71

Observer location 2 : x=87.00m, y=6.00m, z=1.50m  
Average : 1.13 cd/m<sup>2</sup>  
U0 (min/average) : 0.71

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.65  
UI (B2: x = 87.00, y = 6.00, z = 1.50) : 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **7 Komunikace prujezdni 1 var. 6**

### **7.2 Summary, Komunikace prujezdni 1 var. 6**

#### **7.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 3.03 %
SR	: 0.64

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 7 Komunikace prujezdni 1 var. 6

### 7.3 Calculation results, Komunikace prujezdni 1 var. 6

#### 7.3.1 Table, Road (L)

---

[m]	(0.8)	0.88	0.86	0.82	0.99	1.15	1.18	1.22	1.1	0.87
7.33	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
6.00	1.11	1.12	0.92	0.91	1.16	1.3	1.3	1.35	1.41	1.18
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
4.67	1.18	1.11	0.93	0.97	1.18	1.33	1.28	1.36	1.42	1.27
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
3.33	1.18	1.1	0.92	0.95	1.17	1.32	1.26	1.37	[1.43]	1.27
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
2.00	1.12	1.13	0.94	0.92	1.16	1.31	1.31	1.39	1.42	1.19
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
0.67	0.83	0.92	0.91	0.87	1.07	1.23	1.25	1.26	1.12	0.89
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
	1.35	4.05	6.75	9.45	12.15	14.85	17.55	20.25	22.95	25.65
	Luminance [cd/m2]									

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.13 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.71
Threshold increment	TI : 3 %
Longitudinal uniformity UI	Llmin/Llmax : 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 7.3 Calculation results, Komunikace prujezdni 1 var. 6

### 7.3.2 Table, Road (L)

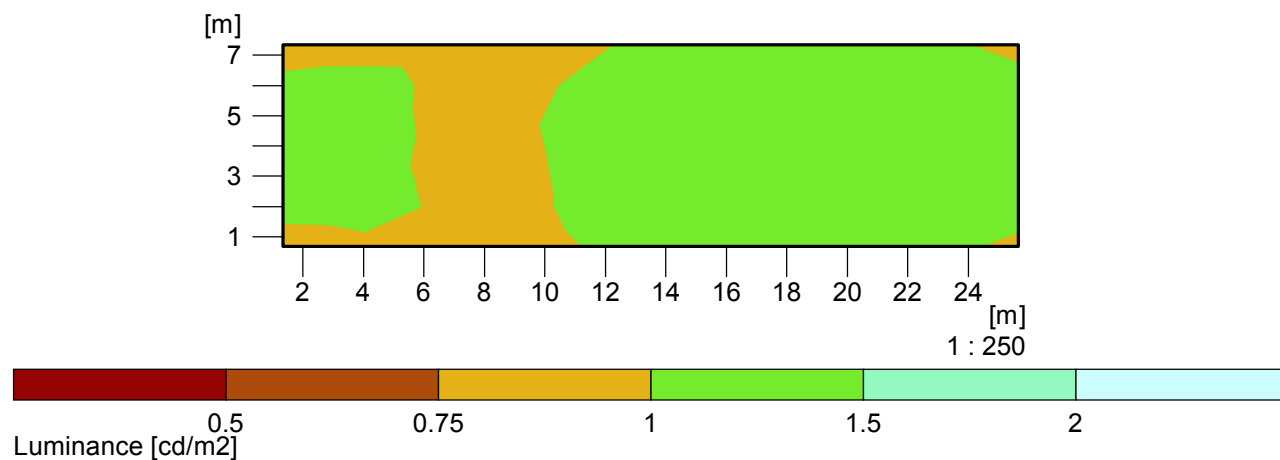
[m]	0.89	1.12	1.26	1.25	1.23	1.07	0.87	0.91	0.92	0.83
7.33	1.19	1.42	1.39	1.31	1.31	1.16	0.92	0.94	1.13	1.12
6.00	1.27	<b>[1.43]</b>	1.37	1.26	1.32	1.17	0.95	0.92	1.1	1.18
4.67	1.27	1.42	1.36	1.28	1.33	1.18	0.97	0.93	1.11	1.18
3.33	1.18	1.41	1.35	1.3	1.3	1.16	0.91	0.92	1.12	1.11
2.00	0.87	1.1	1.22	1.18	1.15	0.99	0.82	0.86	0.88	<b>(0.8)</b>
0.67	1.35	4.05	6.75	9.45	12.15	14.85	17.55	20.25	22.95	25.65
	Luminance [cd/m2]									

Observer location 2	: x = 87, y = 6, z = 1.5
Average luminance	Lav : 1.13 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.71
Threshold increment	TI : 3 %
Longitudinal uniformity UI	Llmin/Llmax : 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 7.3 Calculation results, Komunikace prujezdni 1 var. 6

### 7.3.3 Pseudo colours, Road (L)

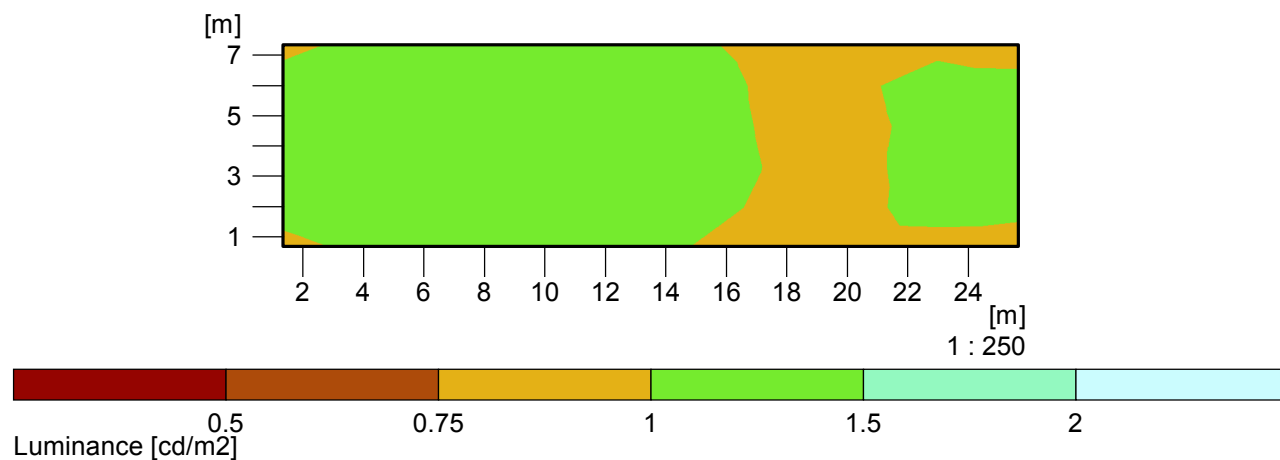


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.13 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.71
Threshold increment	TI : 3 %
Longitudinal uniformity UI	Lmin/Llmax : 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 7.3 Calculation results, Komunikace prujezdni 1 var. 6

#### 7.3.4 Pseudo colours, Road (L)



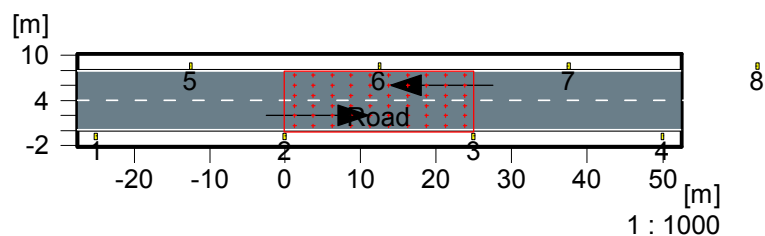
Observer location 2	: x = 87, y = 6, z = 1.5
Average luminance	Lav : 1.13 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.71
Threshold increment	TI : 3 %
Longitudinal uniformity UI	Lmin/Llmax : 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 8 Komunikace prujezdni 1 var. 7

### 8.1 Description, Komunikace prujezdni 1 var. 7

#### 8.1.1 Floor plan

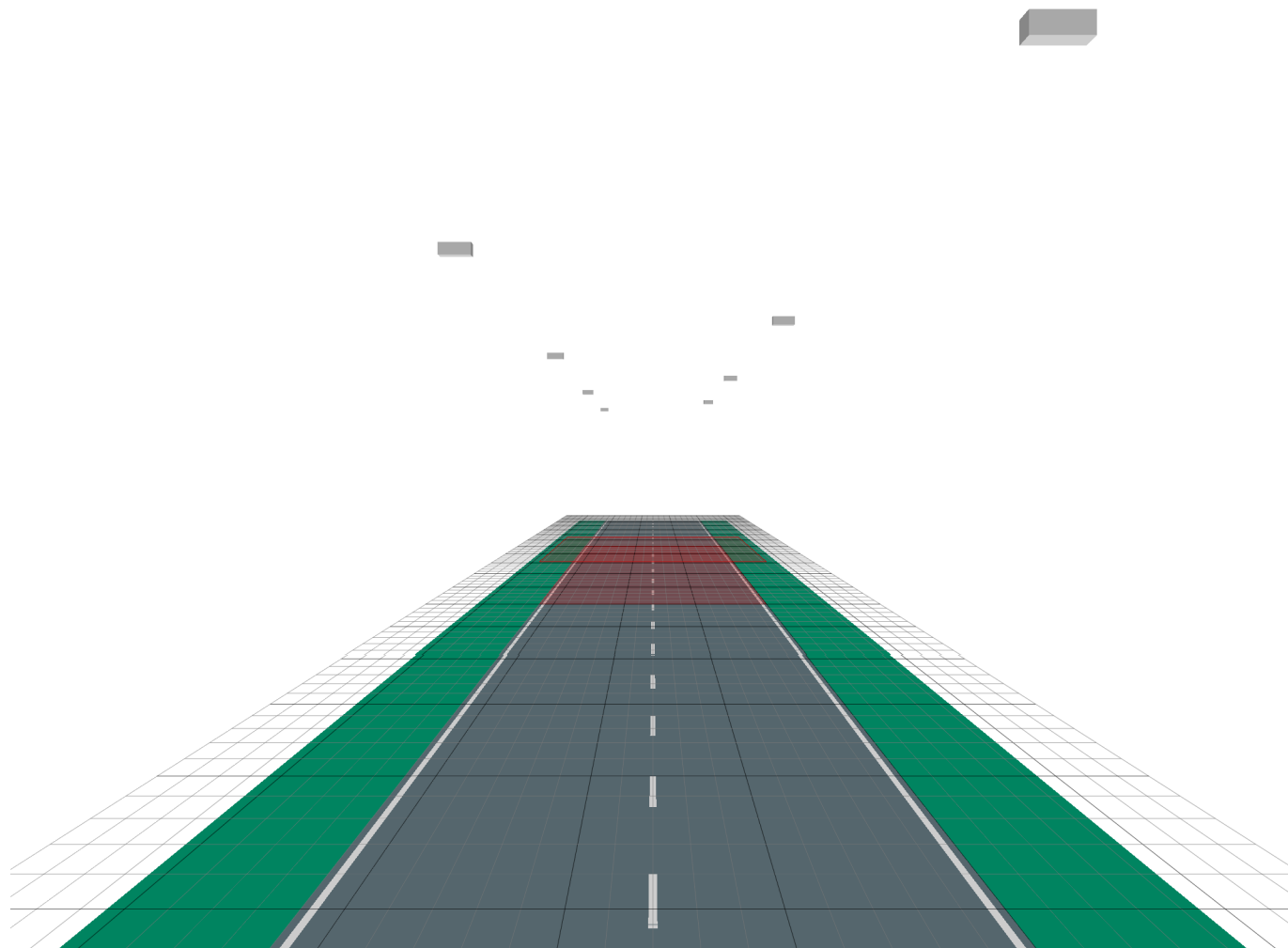


Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	:10.00 m
No. of lanes	: 2	Luminaire spacing	: 25.00 m
Road surface category	: R3	Luminaires - outreach	: -0.60 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 8.1 Description, Komunikace prujezdni 1 var. 7

### 8.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 8 Komunikace pruhovní 1 var. 7

### 8.2 Summary, Komunikace pruhovní 1 var. 7

#### 8.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	(b): 8.00 m	photometric centre height. (h):	10.00 m
No. of lanes	: 2	Luminaire spacing	(a): 25.00 m
Road surface category	: R3	Luminaires - outreach	(u): -0.60 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.87

Observer location 2 : x=97.50m, y=6.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.87

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.83  
UI (B2: x = 97.50, y = 6.00, z = 1.50) : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## **8 Komunikace prujezdni 1 var. 7**

### **8.2 Summary, Komunikace prujezdni 1 var. 7**

#### **8.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B2: y=6.00m)	: 1.68 %
SR	: 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 8 Komunikace prujezdni 1 var. 7

### 8.3 Calculation results, Komunikace prujezdni 1 var. 7

#### 8.3.1 Table, Road (L)

---

[m]	0.98	1.01	1.04	1.03	0.95	(0.94)	1	1.04	1.03	0.99
7.33	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
6.00	1.15	1.16	1.14	1.07	0.97	0.99	1.1	1.19	[1.22]	1.16
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
4.67	1.16	1.16	1.14	1.09	1.06	1.05	1.12	1.14	1.2	1.18
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
3.33	1.05	1.11	1.13	1.17	1.16	1.14	1.16	1.14	1.11	1.07
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
2.00	0.98	1.09	1.15	1.18	1.12	1.1	1.14	1.14	1.07	0.98
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
0.67	0.97	1.02	1.05	1.03	0.98	0.98	1.03	1.06	1.05	0.98
	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘	└─┘
	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m2]									

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.94 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.87
Threshold increment	TI : 1.7 %
Longitudinal uniformity UI	Llmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 8.3 Calculation results, Komunikace prujezdni 1 var. 7

#### 8.3.2 Table, Road (L)

---

[m]	0.98	1.05	1.06	1.03	0.98	0.98	1.03	1.05	1.02	0.97
7.33	0.98	1.07	1.14	1.14	1.1	1.12	1.18	1.15	1.09	0.98
6.00	1.07	1.11	1.14	1.16	1.14	1.16	1.17	1.13	1.11	1.05
4.67	1.18	1.2	1.14	1.12	1.05	1.06	1.09	1.14	1.16	1.16
3.33	1.16	<b>[1.22]</b>	1.19	1.1	0.99	0.97	1.07	1.14	1.16	1.15
2.00	0.99	1.03	1.04	1	<b>(0.94)</b>	0.95	1.03	1.04	1.01	0.98
0.67	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m2]									

[n]

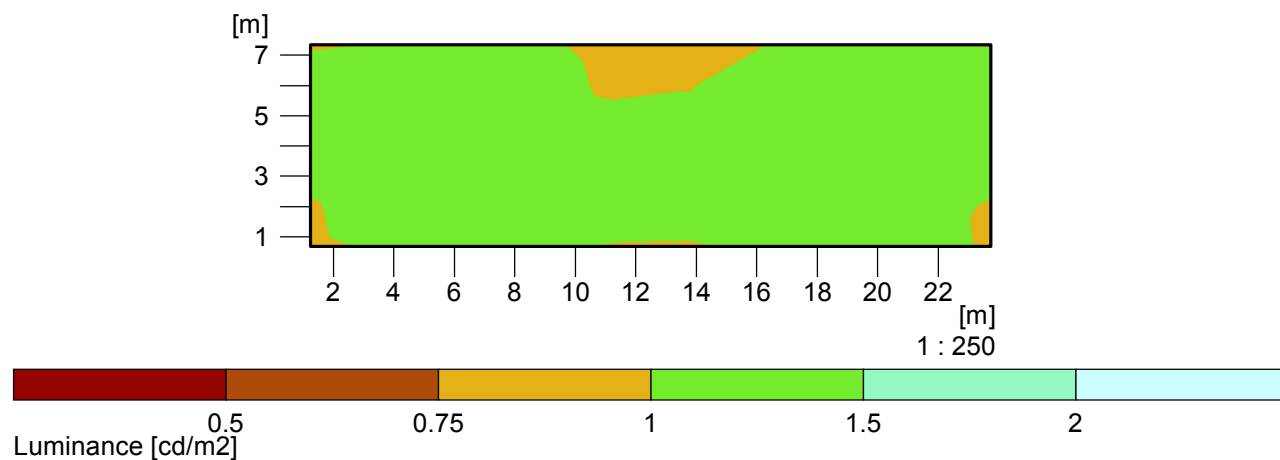
---

Observer location 2	: x = 97.5, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.94 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.87
Threshold increment	TI : 1.7 %
Longitudinal uniformity UI	Llmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 8.3 Calculation results, Komunikace prujezdni 1 var. 7

#### 8.3.3 Pseudo colours, Road (L)

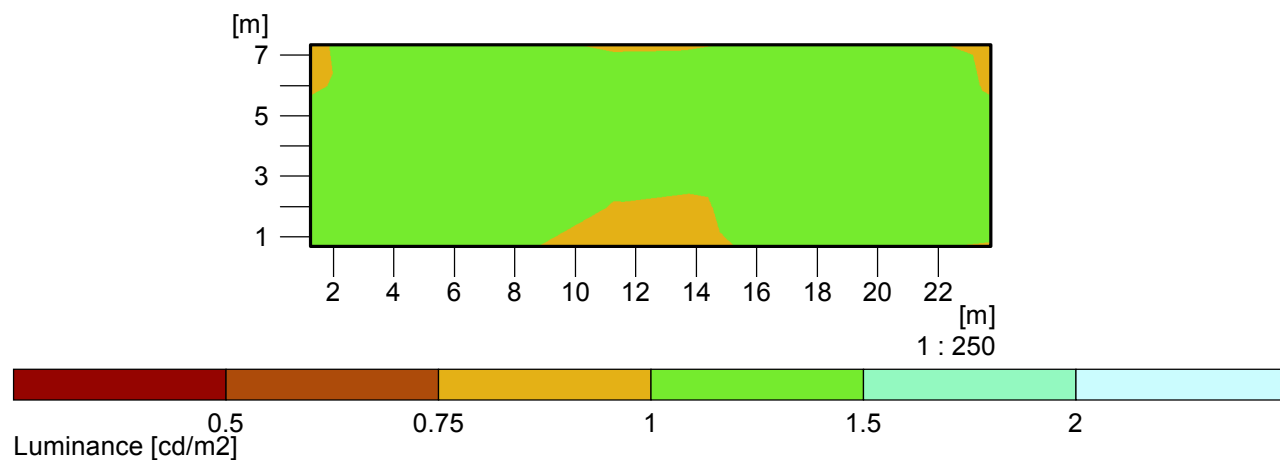


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.94 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.87
Threshold increment	TI : 1.7 %
Longitudinal uniformity UI	Lmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 8.3 Calculation results, Komunikace prujezdni 1 var. 7

#### 8.3.4 Pseudo colours, Road (L)



Observer location 2	: x = 97.5, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.94 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.87
Threshold increment	TI : 1.7 %
Longitudinal uniformity UI	Llmin/Llmax : 0.83

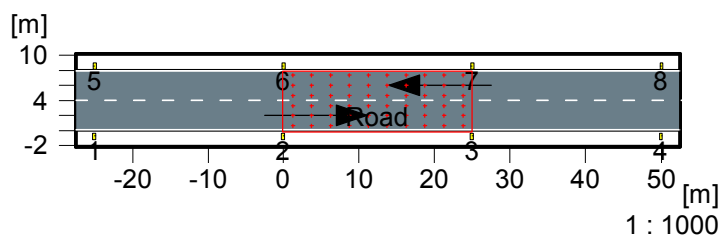
Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 9 Komunikace prujezdni 1 var. 8

### 9.1 Description, Komunikace prujezdni 1 var. 8

#### 9.1.1 Floor plan

---



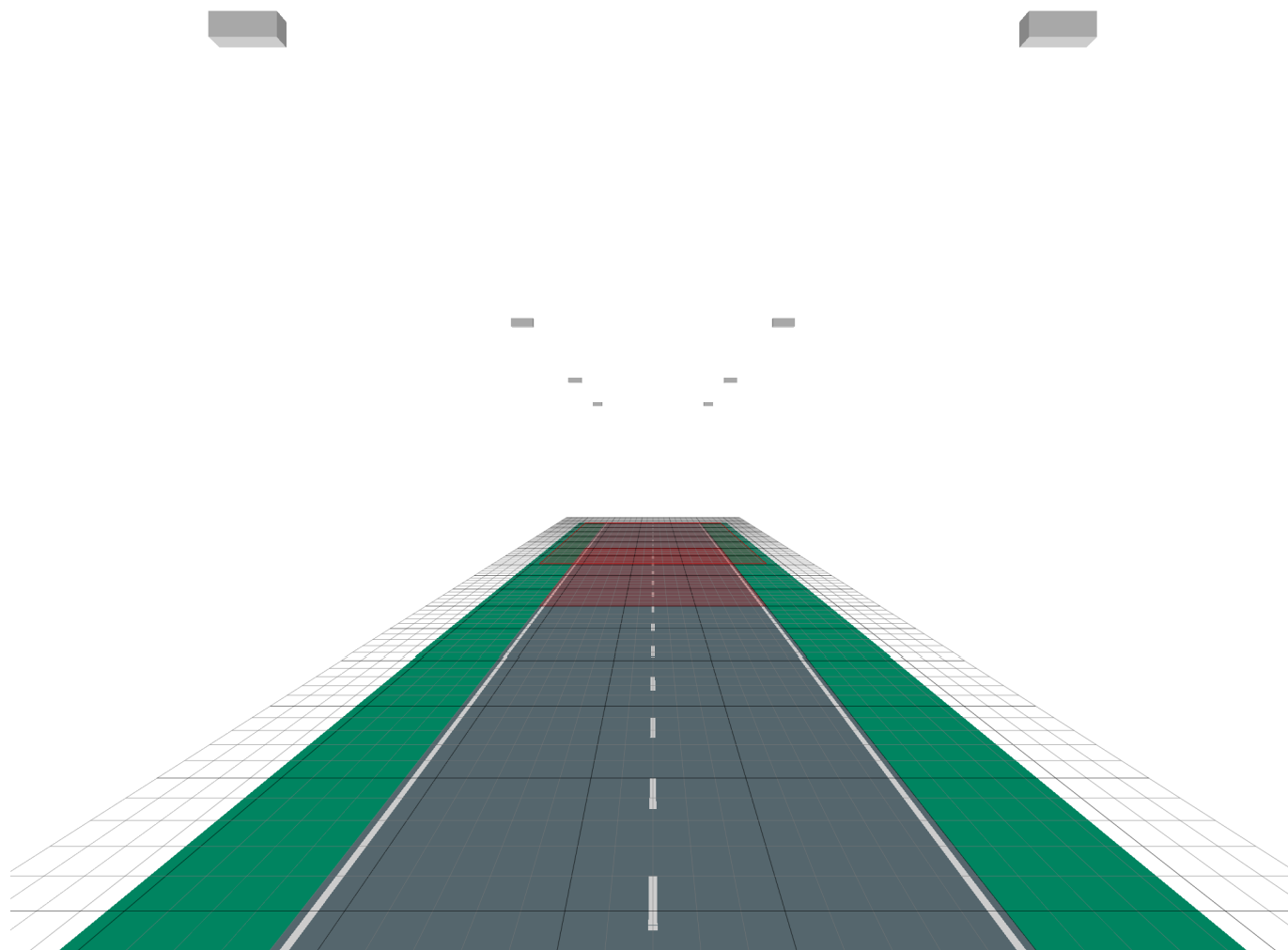
---

Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	: 8.00 m	photometric centre height	:10.00 m
No. of lanes	: 2	Luminaire spacing	: 25.00 m
Road surface category	: R3	Luminaires - outreach	: -0.60 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 9.1 Description, Komunikace prujezdni 1 var. 8

### 9.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 9 Komunikace pruhovní 1 var. 8

### 9.2 Summary, Komunikace pruhovní 1 var. 8

#### 9.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	10.00 m
No. of lanes	: 2	Luminaire spacing	(a): 25.00 m
Road surface category	: R3	Luminaires - outreach	(u): -0.60 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.69

Observer location 2 : x=85.00m, y=6.00m, z=1.50m  
Average : 1.08 cd/m<sup>2</sup>  
U0 (min/average) : 0.69

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.83  
UI (B2: x = 85.00, y = 6.00, z = 1.50) : 0.83

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## **9 Komunikace pruhovní 1 var. 8**

### **9.2 Summary, Komunikace pruhovní 1 var. 8**

#### **9.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 2.40 %
SR	: 0.65

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 9 Komunikace prujezdni 1 var. 8

### 9.3 Calculation results, Komunikace prujezdni 1 var. 8

#### 9.3.1 Table, Road (L)

---

[m]	0.75	0.88	1.04	1.17	1.2	1.17	1.13	1.03	0.89	(0.74)
7.33	└	└	└	└	└	└	└	└	└	└
6.00	1.01	1.12	1.16	1.17	1.14	1.13	1.14	1.18	1.13	0.99
	└	└	└	└	└	└	└	└	└	└
4.67	1.15	1.17	1.09	1.09	1.09	1.06	1.11	1.19	1.21	1.16
	└	└	└	└	└	└	└	└	└	└
3.33	1.13	1.16	1.08	1.07	1.08	1.05	1.12	1.19	1.21	1.15
	└	└	└	└	└	└	└	└	└	└
2.00	0.98	1.09	1.11	1.13	1.13	1.1	1.14	1.17	1.12	0.98
	└	└	└	└	└	└	└	└	└	└
0.67	0.76	0.9	1.06	1.18	[1.22]	1.19	1.15	1.05	0.9	0.75
	└	└	└	└	└	└	└	└	└	└
	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m2]									

[n]

---

Observer location 1		: x = -60, y = 2, z = 1.5
Average luminance	Lav	: 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin	: 0.74 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm	: 0.69
Threshold increment	TI	: 2.4 %
Longitudinal uniformity UI	Llmin/Llmax	: 0.83

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

### 9.3 Calculation results, Komunikace pruhovní 1 var. 8

#### 9.3.2 Table, Road (L)

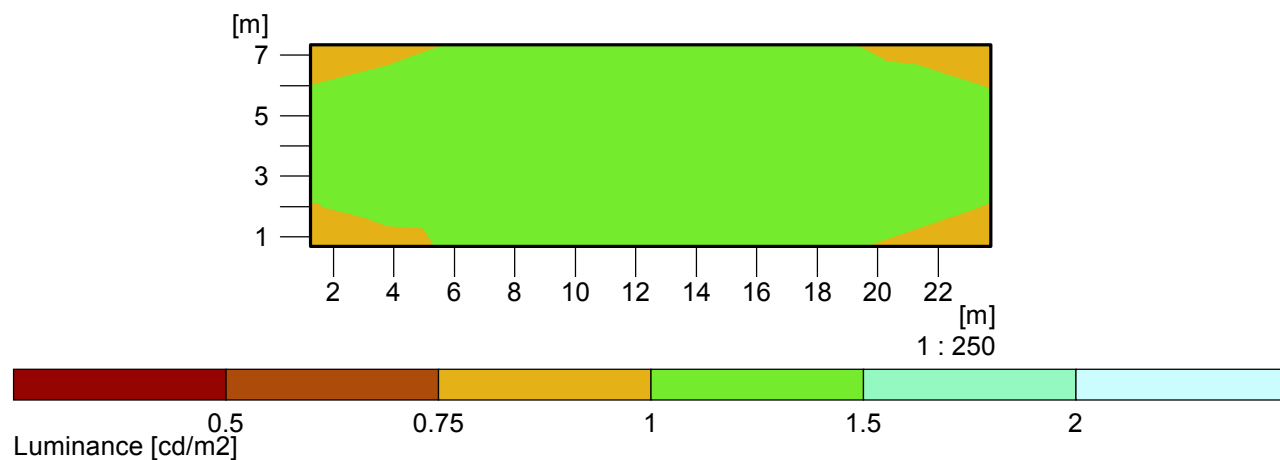
[m]	0.75	0.9	1.05	1.15	1.19	<b>[1.22]</b>	1.18	1.06	0.9	0.76
7.33	0.98	1.12	1.17	1.14	1.1	1.13	1.13	1.11	1.09	0.98
6.00	1.15	1.21	1.19	1.12	1.05	1.08	1.07	1.08	1.16	1.13
4.67	1.16	1.21	1.19	1.11	1.06	1.09	1.09	1.09	1.17	1.15
3.33	0.99	1.13	1.18	1.14	1.13	1.14	1.17	1.16	1.12	1.01
2.00	<b>(0.74)</b>	0.89	1.03	1.13	1.17	1.2	1.17	1.04	0.88	0.75
0.67	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m <sup>2</sup> ]									
	[n]									

Observer location 2	: x = 85, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.74 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.69
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 9.3 Calculation results, Komunikace prujezdni 1 var. 8

### 9.3.3 Pseudo colours, Road (L)

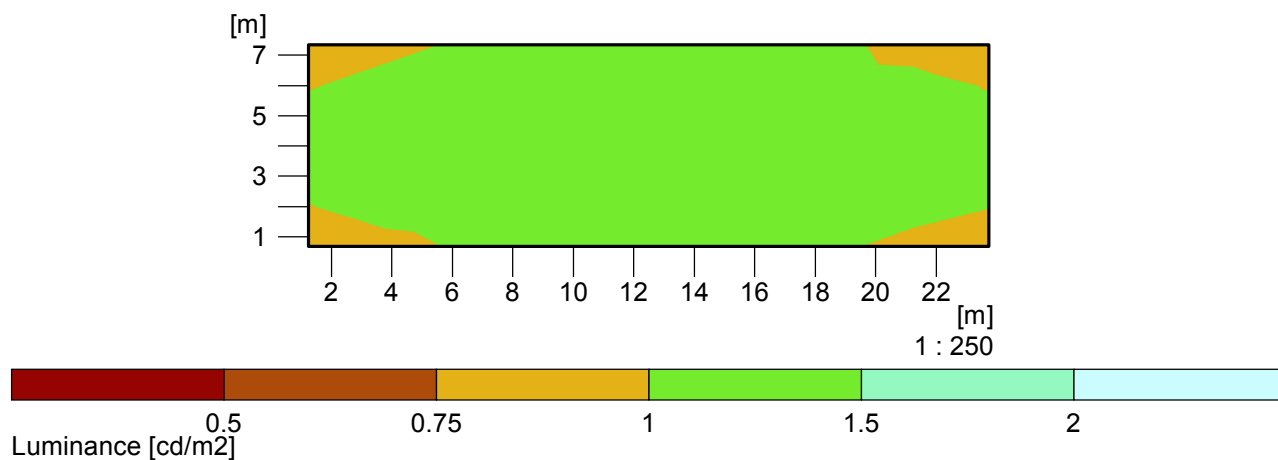


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.74 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.69
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 9.3 Calculation results, Komunikace prujezdni 1 var. 8

#### 9.3.4 Pseudo colours, Road (L)



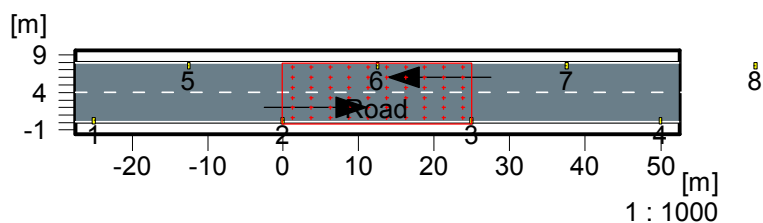
Observer location 2	: x = 85, y = 6, z = 1.5
Average luminance	Lav : 1.08 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.74 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.69
Threshold increment	TI : 2.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.83

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 10 Komunikace prujezdni 1 var. 9

### 10.1 Description, Komunikace prujezdni 1 var. 9

#### 10.1.1 Floor plan

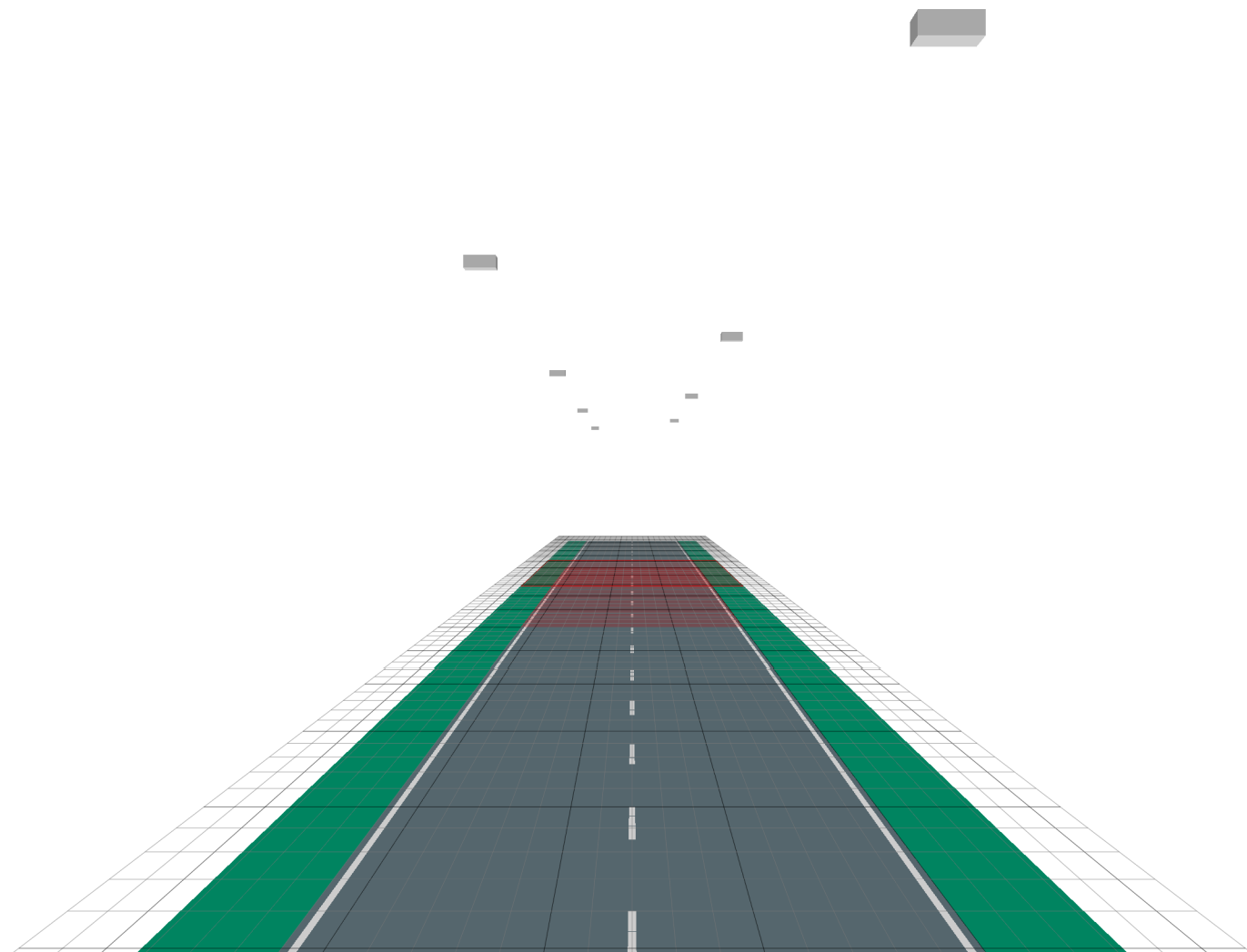


Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	:10.50 m
No. of lanes	: 2	Luminaire spacing	: 25.00 m
Road surface category	: R3	Luminaires - outreach	: 0.40 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 10.1 Description, Komunikace prujezdni 1 var. 9

### 10.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 10 Komunikace pruhovní 1 var. 9

### 10.2 Summary, Komunikace pruhovní 1 var. 9

#### 10.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway (b):	8.00 m	photometric centre height. (h):	10.50 m
No. of lanes	: 2	Luminaire spacing (a):	25.00 m
Road surface category	: R3	Luminaires - outreach (u):	0.40 m
q0	: 0.07	Inclination (δ):	0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.79

Observer location 2 : x=97.50m, y=6.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.79

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.75  
UI (B2: x = 97.50, y = 6.00, z = 1.50) : 0.75

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## **10 Komunikace pruhovní 1 var. 9**

### **10.2 Summary, Komunikace pruhovní 1 var. 9**

#### **10.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 1.49 %
SR	: 0.75

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 10 Komunikace pruhovní 1 var. 9

### 10.3 Calculation results, Komunikace pruhovní 1 var. 9

#### 10.3.1 Table, Road (L)

---

[m]	0.98	0.99	0.96	0.88	(0.8)	(0.8)	0.89	1.02	1.04	1
7.33	1.13	1.1	1.02	0.93	0.85	0.87	0.99	1.11	[1.18]	1.16
6.00	1.06	1.06	1.03	1.02	0.95	0.96	1.05	1.1	1.13	1.08
4.67	0.95	1.03	1.08	1.1	1.06	1.04	1.07	1.06	1.04	0.96
3.33	0.88	1	1.12	1.17	1.15	1.13	1.11	1.04	0.96	0.88
2.00	0.84	0.94	1.06	1.07	1.02	1.01	1.03	1	0.92	0.85
0.67	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m <sup>2</sup> ]									

[n]

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.79
Threshold increment	TI : 1.5 %
Longitudinal uniformity UI	Llmin/Llmax : 0.75

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 10.3 Calculation results, Komunikace prujezdni 1 var. 9

#### 10.3.2 Table, Road (L)

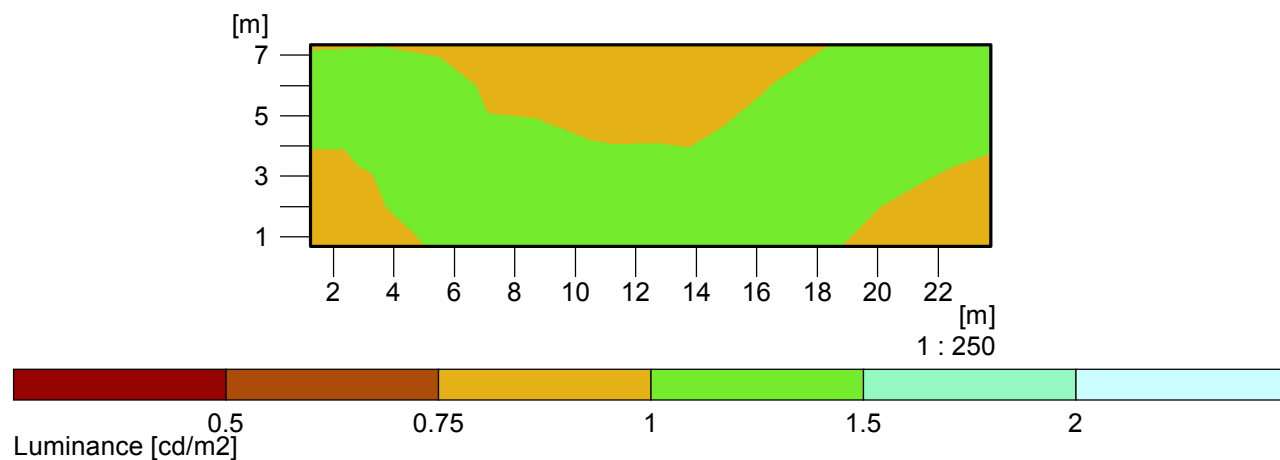
[m]	0.85	0.92	1	1.03	1.01	1.02	1.07	1.06	0.94	0.84
7.33	0.88	0.96	1.04	1.11	1.13	1.15	1.17	1.12	1	0.88
6.00	0.96	1.04	1.06	1.07	1.04	1.06	1.1	1.08	1.03	0.95
4.67	1.08	1.13	1.1	1.05	0.96	0.95	1.02	1.03	1.06	1.06
3.33	1.16	[1.18]	1.11	0.99	0.87	0.85	0.93	1.02	1.1	1.13
2.00	1	1.04	1.02	0.89	(0.8)	(0.8)	0.88	0.96	0.99	0.98
0.67	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m2]									

Observer location 2	: x = 97.5, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.79
Threshold increment	TI : 1.5 %
Longitudinal uniformity UI	Llmin/Llmax : 0.75

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 10.3 Calculation results, Komunikace prujezdni 1 var. 9

### 10.3.3 Pseudo colours, Road (L)

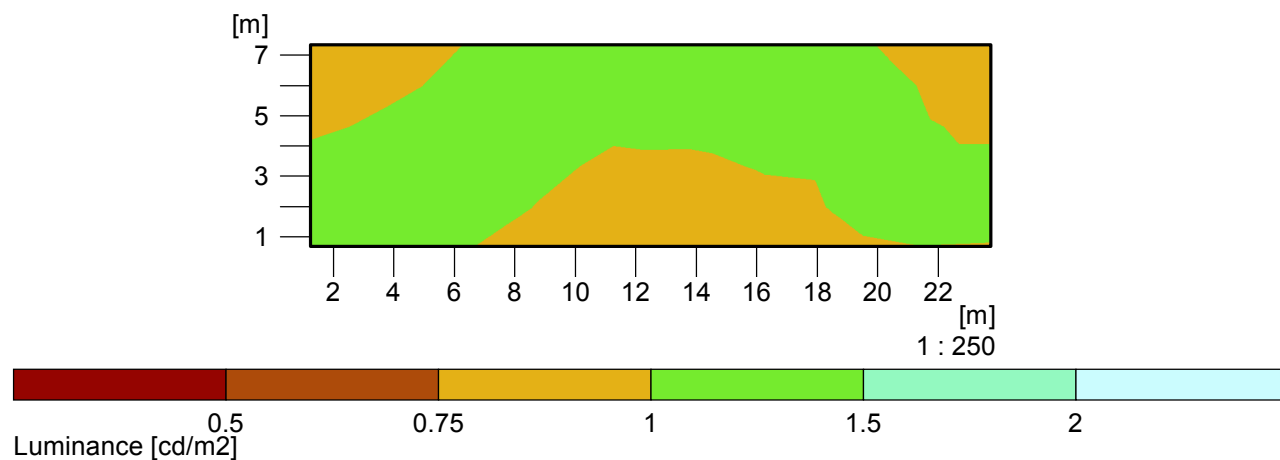


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.79
Threshold increment	TI : 1.5 %
Longitudinal uniformity UI	Lmin/Llmax : 0.75

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 10.3 Calculation results, Komunikace prujezdni 1 var. 9

#### 10.3.4 Pseudo colours, Road (L)



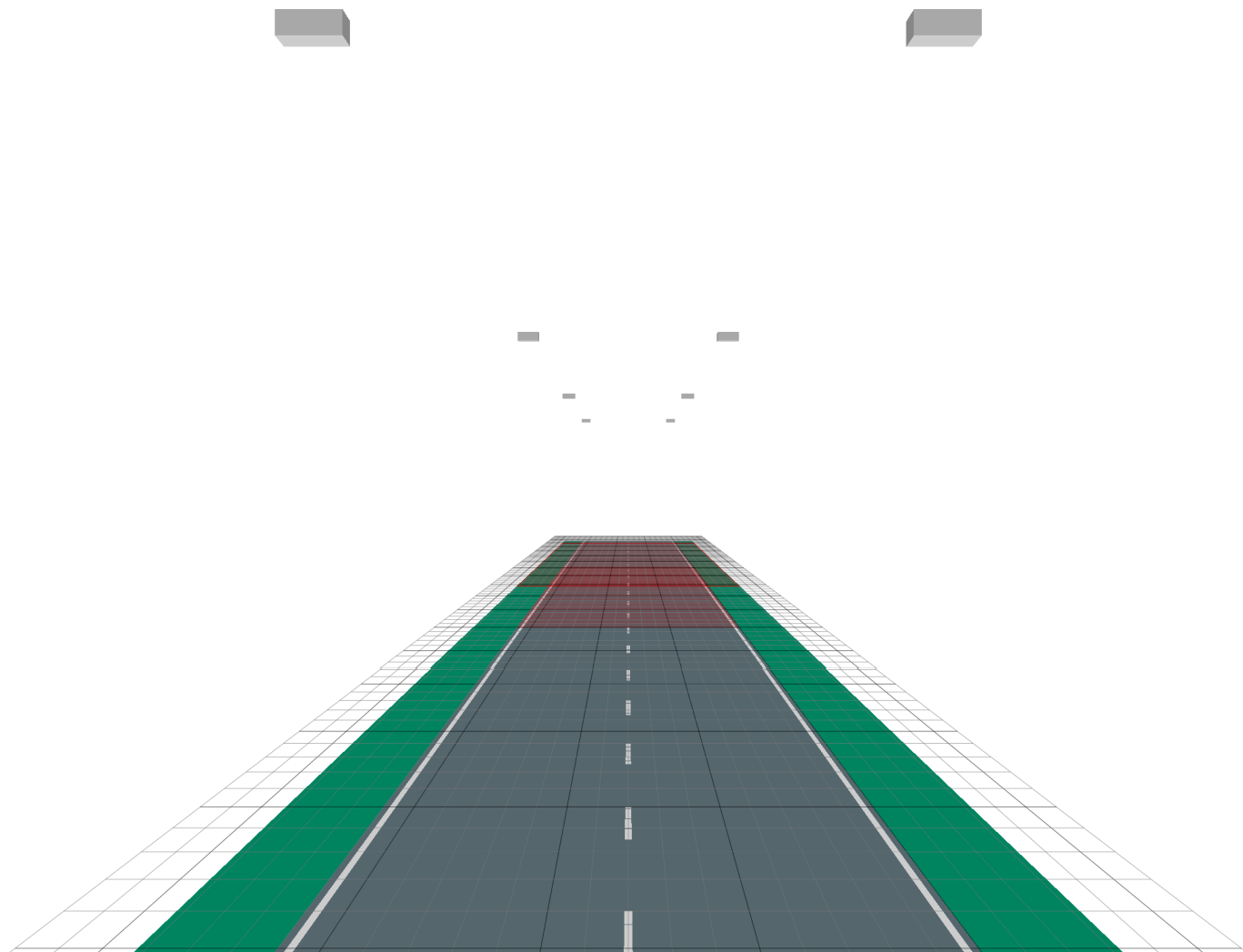
Observer location 2	: x = 97.5, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.8 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.79
Threshold increment	TI : 1.5 %
Longitudinal uniformity UI	Lmin/Llmax : 0.75



Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 11.1 Description, Komunikace prujezdni 1 var. 10

### 11.1.2 3D view, View from the left



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 11 Komunikace pruhovní 1 var. 10

### 11.2 Summary, Komunikace pruhovní 1 var. 10

#### 11.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	10.50 m
No. of lanes	: 2	Luminaire spacing	(a): 25.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.40 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.78

Observer location 2 : x=85.00m, y=6.00m, z=1.50m  
Average : 1.01 cd/m<sup>2</sup>  
U0 (min/average) : 0.78

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.88  
UI (B2: x = 85.00, y = 6.00, z = 1.50) : 0.88

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## **11 Komunikace pruhovní 1 var. 10**

### **11.2 Summary, Komunikace pruhovní 1 var. 10**

#### **11.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 1.97 %
SR	: 0.75

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 11 Komunikace pruhovní 1 var. 10

### 11.3 Calculation results, Komunikace pruhovní 1 var. 10

#### 11.3.1 Table, Road (L)

---

[m]	(0.79)	0.9	0.98	0.99	0.99	0.99	0.99	0.99	0.93	0.81
7.33	0.94	1.03	1.07	1.08	1.07	1.05	1.06	1.06	1.04	0.95
6.00	0.98	1.06	1.06	[1.1]	1.07	1.04	1.06	1.07	1.05	0.97
4.67	0.96	1.04	1.05	1.09	1.06	1.03	1.05	1.08	1.05	0.96
3.33	0.95	1.04	1.08	1.08	1.07	1.06	1.07	1.08	1.05	0.96
2.00	0.83	0.94	1.04	1.05	1.03	1.03	1.03	1.02	0.95	0.83
0.67	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m <sup>2</sup> ]									
	[m]									

---

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.78
Threshold increment	TI : 2 %
Longitudinal uniformity UI	Llmin/Llmax : 0.88

Object : Studie verejného osvetlení - komunikace pruhovní 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 11.3 Calculation results, Komunikace pruhovní 1 var. 10

### 11.3.2 Table, Road (L)

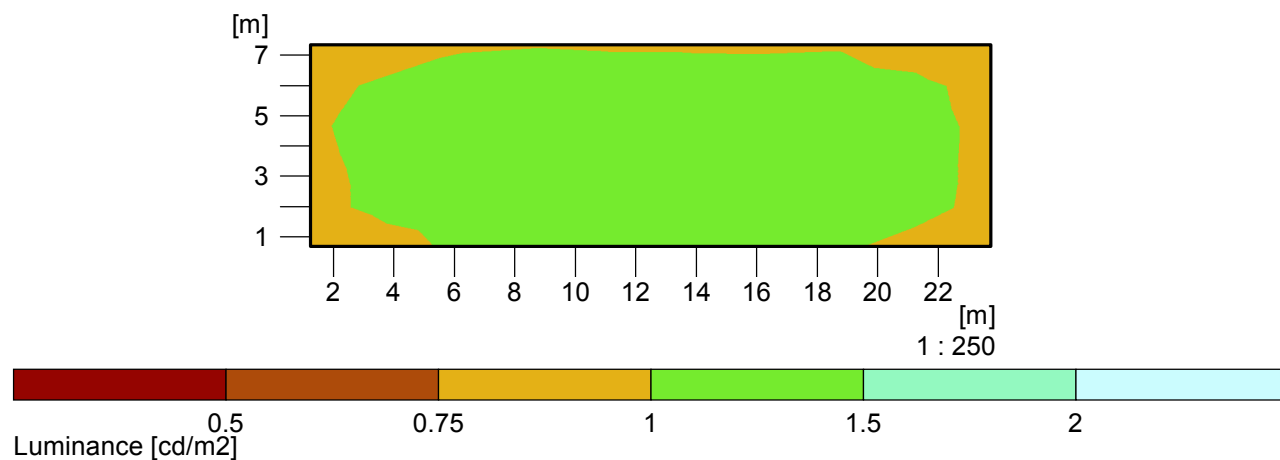
[m]										
7.33	0.83	0.95	1.02	1.03	1.03	1.03	1.05	1.04	0.94	0.83
6.00	0.96	1.05	1.08	1.07	1.06	1.07	1.08	1.08	1.04	0.95
4.67	0.96	1.05	1.08	1.05	1.03	1.06	1.09	1.05	1.04	0.96
3.33	0.97	1.05	1.07	1.06	1.04	1.07	<b>[1.1]</b>	1.06	1.06	0.98
2.00	0.95	1.04	1.06	1.06	1.05	1.07	1.08	1.07	1.03	0.94
0.67	0.81	0.93	0.99	0.99	0.99	0.99	0.99	0.98	0.9	<b>(0.79)</b>
	1.25	3.75	6.25	8.75	11.25	13.75	16.25	18.75	21.25	23.75
	Luminance [cd/m <sup>2</sup> ]									
	[m]									

Observer location 2	: x = 85, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.78
Threshold increment	TI : 2 %
Longitudinal uniformity UI	Llmin/Llmax : 0.88

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 11.3 Calculation results, Komunikace prujezdni 1 var. 10

### 11.3.3 Pseudo colours, Road (L)

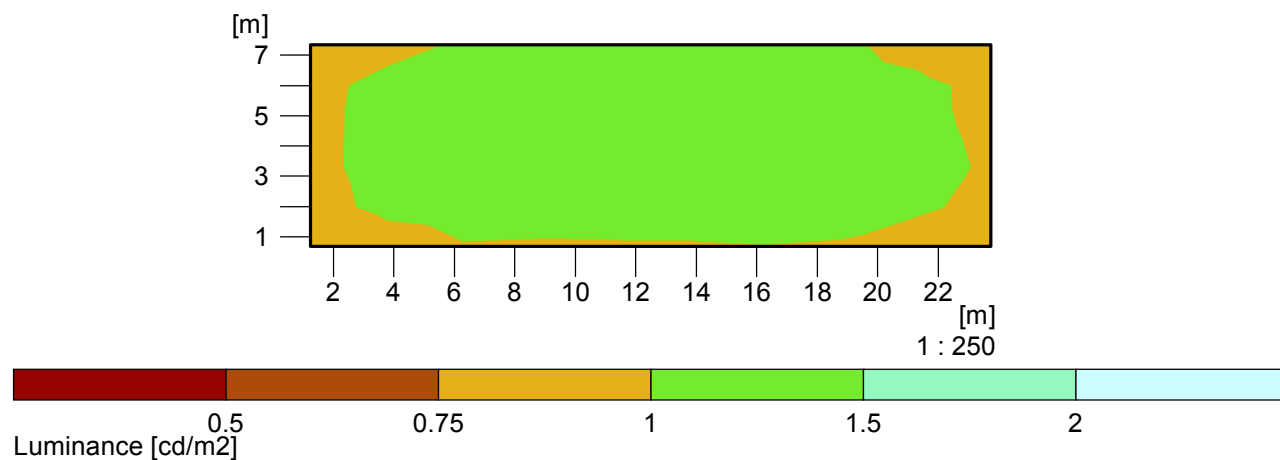


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.78
Threshold increment	TI : 2 %
Longitudinal uniformity UI	Lmin/Llmax : 0.88

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 11.3 Calculation results, Komunikace prujezdni 1 var. 10

### 11.3.4 Pseudo colours, Road (L)



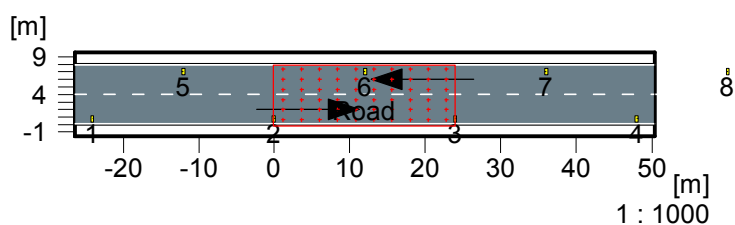
Observer location 2	: x = 85, y = 6, z = 1.5
Average luminance	Lav : 1.01 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.78
Threshold increment	TI : 2 %
Longitudinal uniformity UI	Lmin/Llmax : 0.88

Object : Studie verejného osvetlení - komunikace pruhzdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 12 Komunikace pruhzdni 1 var. 11

### 12.1 Description, Komunikace pruhzdni 1 var. 11

#### 12.1.1 Floor plan



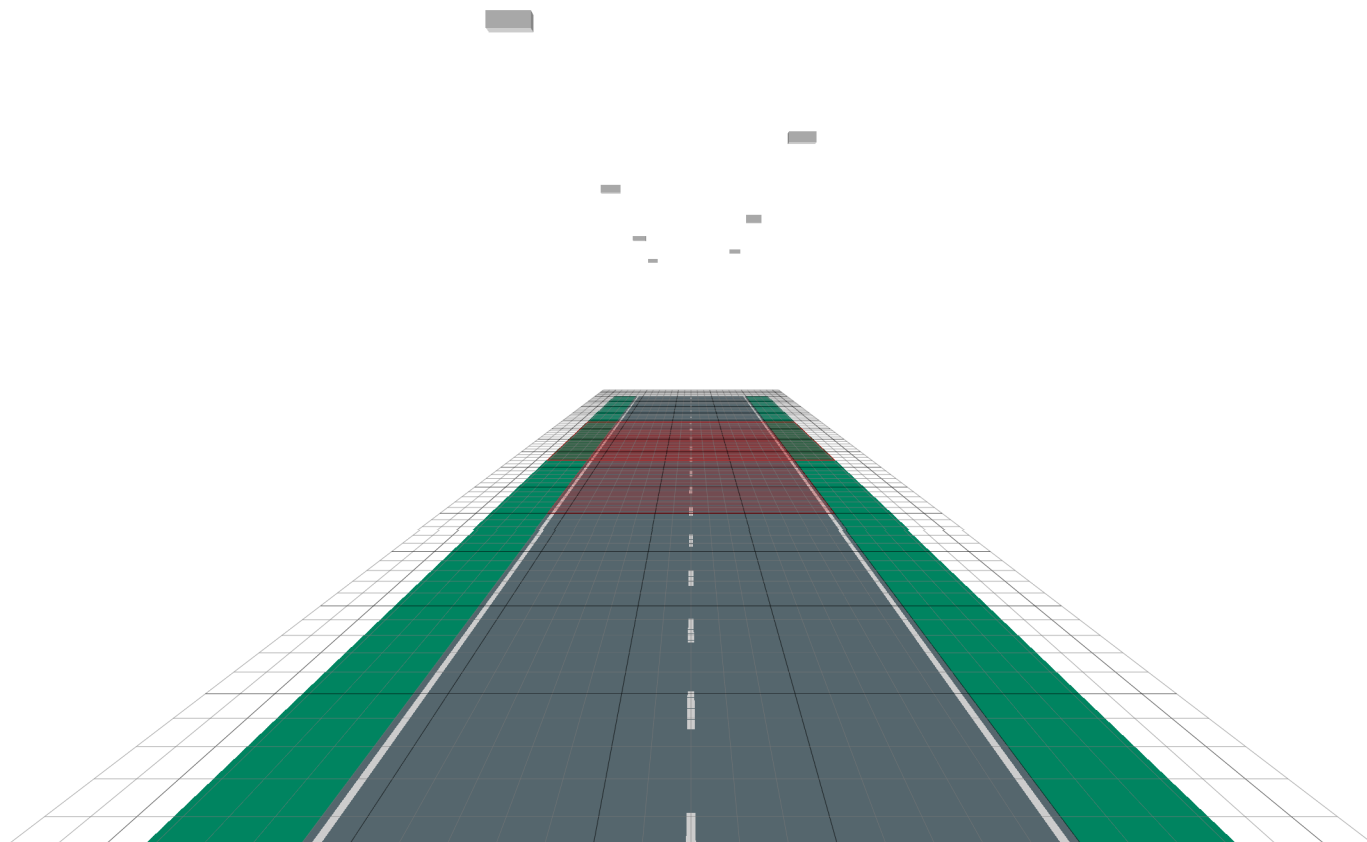
Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	: 8.00 m	photometric centre height	:10.50 m
No. of lanes	: 2	Luminaire spacing	: 24.00 m
Road surface category	: R3	Luminaires - outreach	: 0.90 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 12.1 Description, Komunikace prujezdni 1 var. 11

### 12.1.2 3D view, View from the left

---



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 12 Komunikace pruhovní 1 var. 11

### 12.2 Summary, Komunikace pruhovní 1 var. 11

#### 12.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Staggered layout
Width of roadway	(b): 8.00 m	photometric centre height. (h):	10.50 m
No. of lanes	: 2	Luminaire spacing	(a): 24.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.90 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.77

Observer location 2 : x=96.00m, y=6.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.77

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.76  
UI (B2: x = 96.00, y = 6.00, z = 1.50) : 0.76

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## **12 Komunikace pruhovní 1 var. 11**

### **12.2 Summary, Komunikace pruhovní 1 var. 11**

#### **12.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B2: y=6.00m)	: 1.40 %
SR	: 0.8

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 12 Komunikace prujezdni 1 var. 11

### 12.3 Calculation results, Komunikace prujezdni 1 var. 11

#### 12.3.1 Table, Road (L)

[m]	1	1.02	0.97	0.88	(0.79)	0.8	0.9	1.04	1.08	1.03
7.33	1.12	1.1	1.02	0.95	0.86	0.88	1.02	1.14	1.18	1.15
6.00	1.08	1.1	1.07	1.05	0.96	0.98	1.1	1.15	1.15	1.09
4.67	0.97	1.07	1.13	1.13	1.07	1.06	1.11	1.1	1.07	0.97
3.33	0.9	1.04	1.16	[1.19]	1.16	1.14	1.13	1.07	0.99	0.9
2.00	0.84	0.96	1.09	1.12	1.06	1.05	1.07	1.02	0.93	0.85
0.67	1.20	3.60	6.00	8.40	10.80	13.20	15.60	18.00	20.40	22.80
	Luminance [cd/m2]									

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.77
Threshold increment	TI : 1.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.76

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 12.3 Calculation results, Komunikace prujezdni 1 var. 11

### 12.3.2 Table, Road (L)

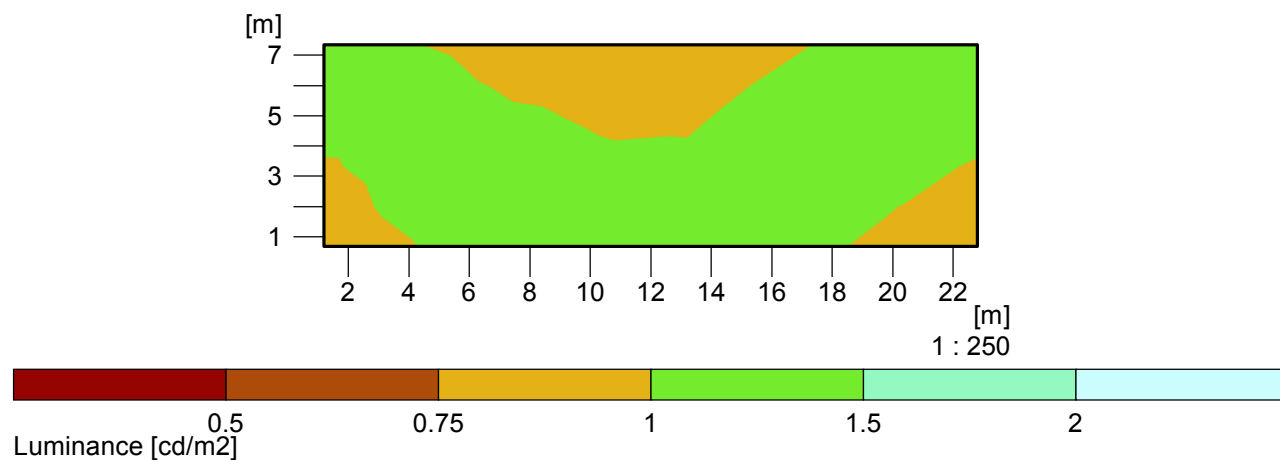
[m]	0.85	0.93	1.02	1.07	1.05	1.06	1.12	1.09	0.96	0.84
7.33	0.9	0.99	1.07	1.13	1.14	1.16	[1.19]	1.16	1.04	0.9
6.00	0.97	1.07	1.1	1.11	1.06	1.07	1.13	1.13	1.07	0.97
4.67	1.09	1.15	1.15	1.1	0.98	0.96	1.05	1.07	1.1	1.08
3.33	1.15	1.18	1.14	1.02	0.88	0.86	0.95	1.02	1.1	1.12
2.00	1.03	1.08	1.04	0.9	0.8	(0.79)	0.88	0.97	1.02	1
0.67	1.20	3.60	6.00	8.40	10.80	13.20	15.60	18.00	20.40	22.80
	Luminance [cd/m2]									

Observer location 2	: x = 96, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.77
Threshold increment	TI : 1.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.76

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 12.3 Calculation results, Komunikace prujezdni 1 var. 11

### 12.3.3 Pseudo colours, Road (L)

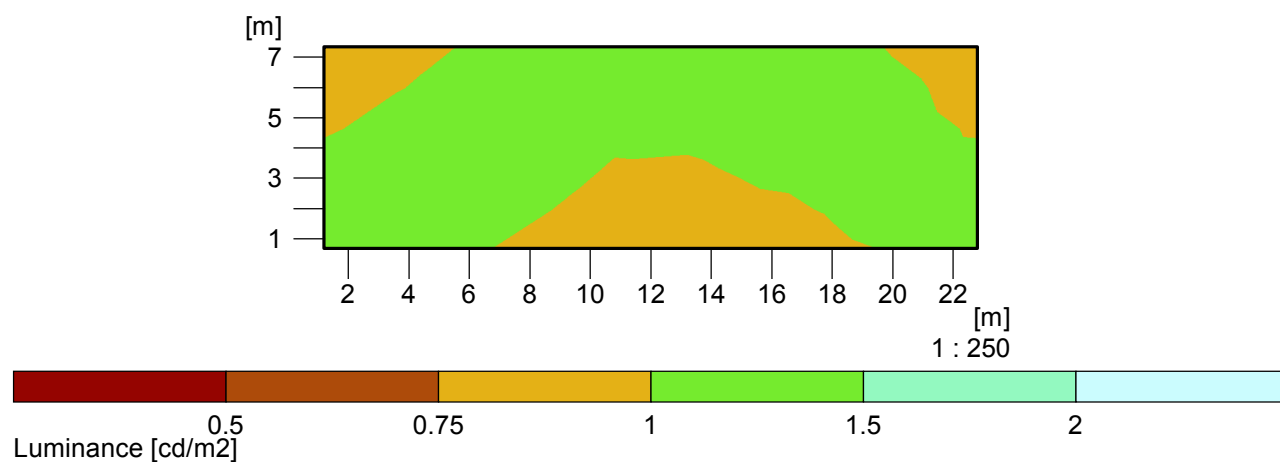


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.77
Threshold increment	TI : 1.4 %
Longitudinal uniformity UI	Lmin/Llmax : 0.76

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 12.3 Calculation results, Komunikace prujezdni 1 var. 11

### 12.3.4 Pseudo colours, Road (L)



Observer location 2	: x = 96, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.79 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.77
Threshold increment	TI : 1.4 %
Longitudinal uniformity UI	Llmin/Llmax : 0.76

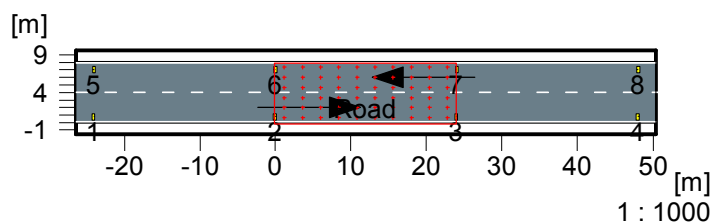
Object : Studie verejného osvetlení - komunikace pruhzdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 13 Komunikace pruhzdni 1 var. 12

### 13.1 Description, Komunikace pruhzdni 1 var. 12

#### 13.1.1 Floor plan

---



---

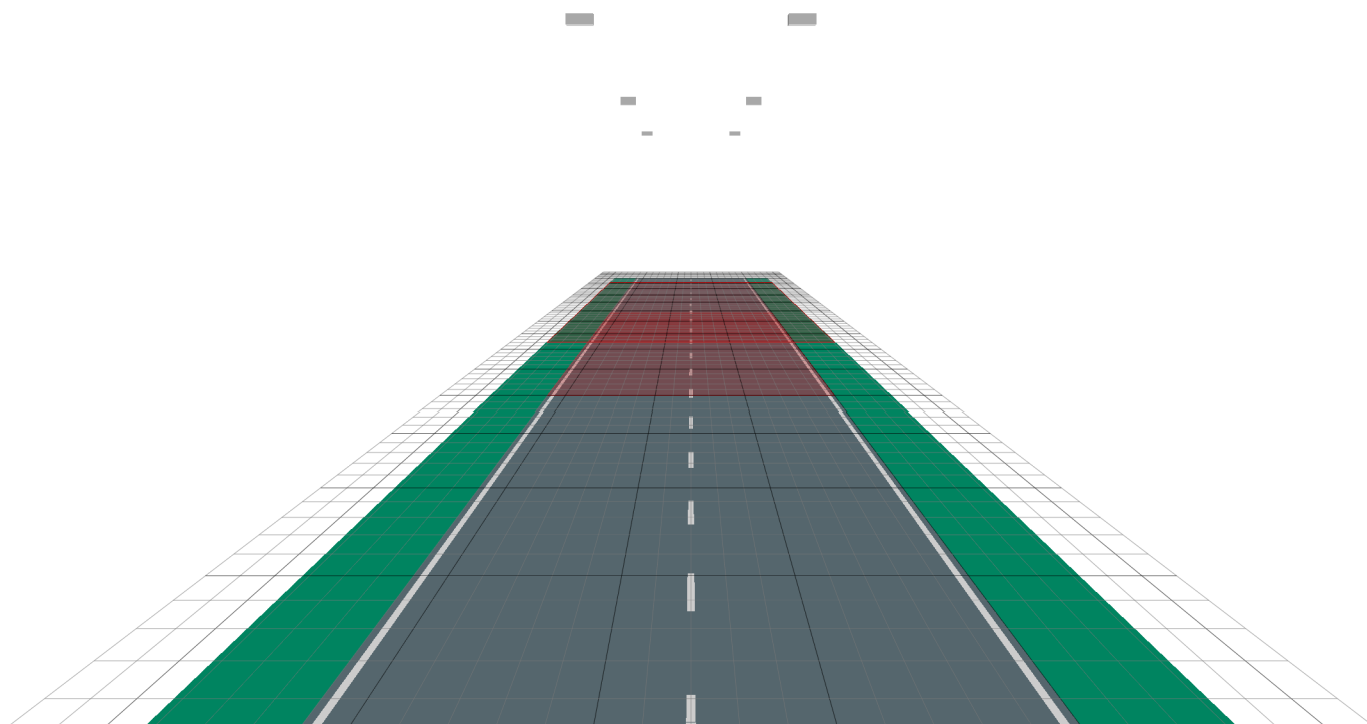
Road		Luminaire type	:CIVIC 2 150W HID 240V CL1 EFL + HIT-CE
Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	: 8.00 m	photometric centre height	:10.50 m
No. of lanes	: 2	Luminaire spacing	: 24.00 m
Road surface category	: R3	Luminaires - outreach	: 0.90 m
q0	: 0.07	Inclination	: 0.00°

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

## 13.1 Description, Komunikace prujezdni 1 var. 12

### 13.1.2 3D view, View from the left

---



Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## 13 Komunikace pruhovní 1 var. 12

### 13.2 Summary, Komunikace pruhovní 1 var. 12

#### 13.2.1 Result overview, Road

##### Luminaire data

Manufacturer : Thorn  
Order No. : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5] ()  
Luminaire name : CIVIC 2 150W HID 240V CL1 EFL + HIT-CE 150W [V3L5]  
Equipment : 1 x HIT-CE 150 W / 14000 lm

Road layout	: without central reservation	Luminaire placing	: Both sides
Width of roadway	(b): 8.00 m	photometric centre height. (h):	10.50 m
No. of lanes	: 2	Luminaire spacing	(a): 24.00 m
Road surface category	: R3	Luminaires - outreach	(u): 0.90 m
q0	: 0.07	Inclination	(δ): 0.00°
Right hand drivers		Reduction factor	: 0.60

##### Luminance

Observer location 1 : x=-60.00m, y=2.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.8

Observer location 2 : x=84.00m, y=6.00m, z=1.50m  
Average : 1.03 cd/m<sup>2</sup>  
U0 (min/average) : 0.8

##### Longitudinal uniformity

UI (B1: x = -60.00, y = 2.00, z = 1.50) : 0.85  
UI (B2: x = 84.00, y = 6.00, z = 1.50) : 0.85

Object : Studie verejného osvetlení - komunikace pruhovní 1  
Installation :  
Project number :  
Date : 19.12.2007

## **13 Komunikace pruhovní 1 var. 12**

### **13.2 Summary, Komunikace pruhovní 1 var. 12**

#### **13.2.1 Result overview, Road**

##### **Glare/ surrounding brightness**

TI (B1: y=2.00m)	: 1.82 %
SR	: 0.8

Object : Studie verejného osvetlení - komunikace prujezdni 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

## 13 Komunikace prujezdni 1 var. 12

### 13.3 Calculation results, Komunikace prujezdni 1 var. 12

#### 13.3.1 Table, Road (L)

[m]	(0.83)	0.94	1	0.99	0.96	0.97	0.97	1	0.96	0.85
7.33	0.94	1.05	1.1	1.11	1.07	1.06	1.06	1.06	1.03	0.94
6.00	0.96	1.11	1.14	[1.16]	1.11	1.09	1.09	1.08	1.04	0.94
4.67	0.96	1.09	1.14	1.15	1.1	1.07	1.09	1.09	1.05	0.94
3.33	0.96	1.08	1.14	1.13	1.1	1.08	1.09	1.09	1.05	0.96
2.00	0.88	1	1.07	1.05	1.02	1.02	1.02	1.04	1	0.89
0.67	1.20	3.60	6.00	8.40	10.80	13.20	15.60	18.00	20.40	22.80
	Luminance [cd/m2]									

Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.83 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.8
Threshold increment	TI : 1.8 %
Longitudinal uniformity UI	Llmin/Llmax : 0.85

Object : Studie verejného osvetlení - komunikace pruhovní 1  
 Installation :  
 Project number :  
 Date : 19.12.2007

### 13.3 Calculation results, Komunikace pruhovní 1 var. 12

#### 13.3.2 Table, Road (L)

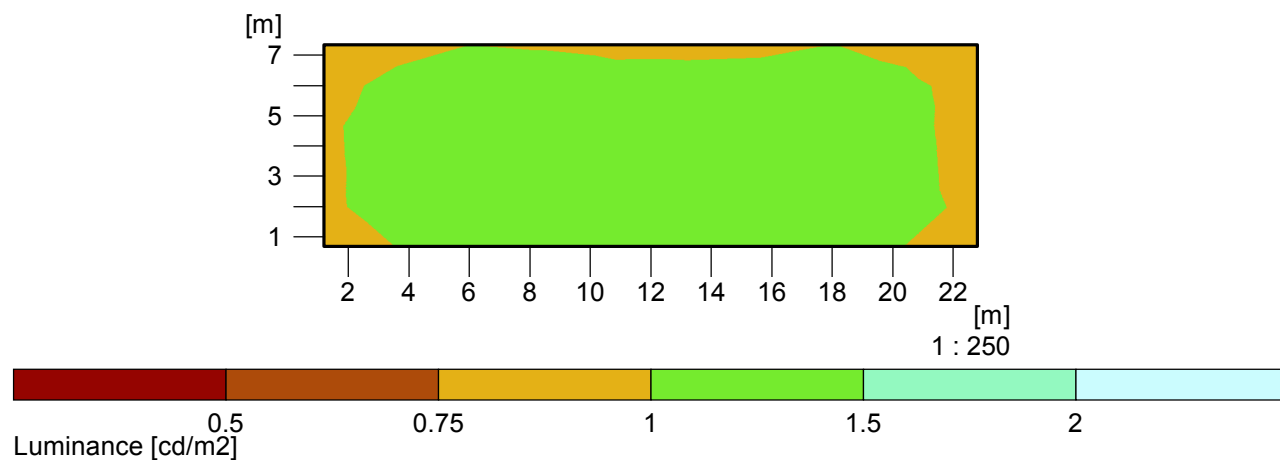
[m]	0.89	1	1.04	1.02	1.02	1.02	1.05	1.07	1	0.88
7.33	0.96	1.05	1.09	1.09	1.08	1.1	1.13	1.14	1.08	0.96
6.00	0.94	1.05	1.09	1.09	1.07	1.1	1.15	1.14	1.09	0.96
4.67	0.94	1.04	1.08	1.09	1.09	1.11	<b>[1.16]</b>	1.14	1.11	0.96
3.33	0.94	1.03	1.06	1.06	1.06	1.07	1.11	1.1	1.05	0.94
2.00	0.85	0.96	1	0.97	0.97	0.96	0.99	1	0.94	<b>(0.83)</b>
0.67	1.20	3.60	6.00	8.40	10.80	13.20	15.60	18.00	20.40	22.80
	Luminance [cd/m <sup>2</sup> ]									

Observer location 2	: x = 84, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.83 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.8
Threshold increment	TI : 1.8 %
Longitudinal uniformity UI	Llmin/Llmax : 0.85

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 13.3 Calculation results, Komunikace prujezdni 1 var. 12

#### 13.3.3 Pseudo colours, Road (L)

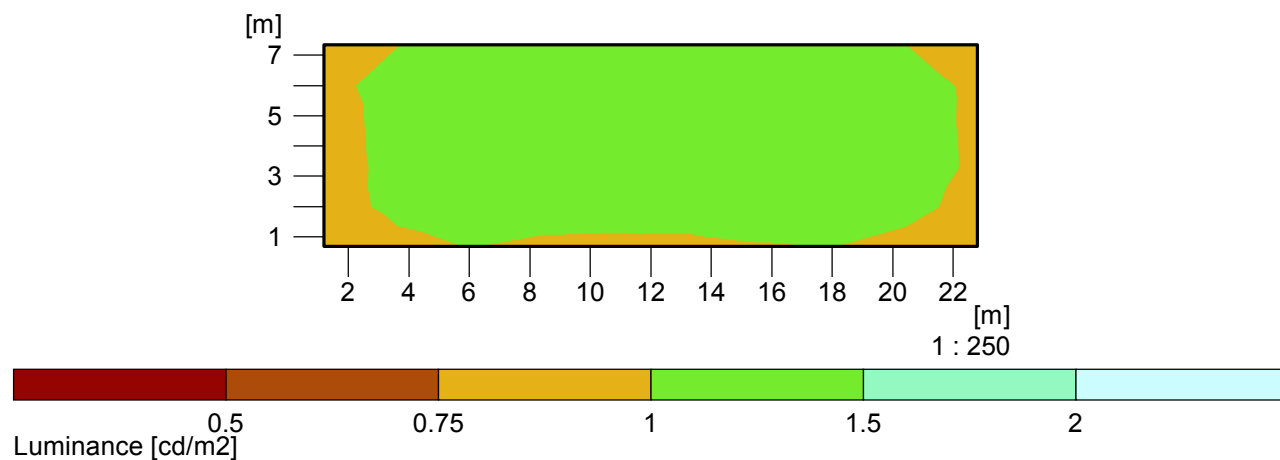


Observer location 1	: x = -60, y = 2, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.83 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.8
Threshold increment	TI : 1.8 %
Longitudinal uniformity UI	Llmin/Llmax : 0.85

Object : Studie verejného osvetlení - komunikace prujezdni 1  
Installation :  
Project number :  
Date : 19.12.2007

### 13.3 Calculation results, Komunikace prujezdni 1 var. 12

#### 13.3.4 Pseudo colours, Road (L)



Observer location 2	: x = 84, y = 6, z = 1.5
Average luminance	Lav : 1.03 cd/m <sup>2</sup>
Minimum luminance	Lmin : 0.83 cd/m <sup>2</sup>
Overall uniformity U0	Lmin/Lm : 0.8
Threshold increment	TI : 1.8 %
Longitudinal uniformity UI	Llmin/Llmax : 0.85