

## 경춘선 숲길 조명시뮬레이션

Installation :

Project number : rev04

Customer :

Processed by :

Date : 20.03.2018

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 : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

# 1 Luminaire data

## 1.1 5m\_led 30w ()

### 1.1.1 Data sheet

#### 5m\_led 30w

Luminaire arrangement for:

	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!30w :	0.000	0.350	5.000	0	5	0

Position is the LDC position of the luminaire.

#### !30w

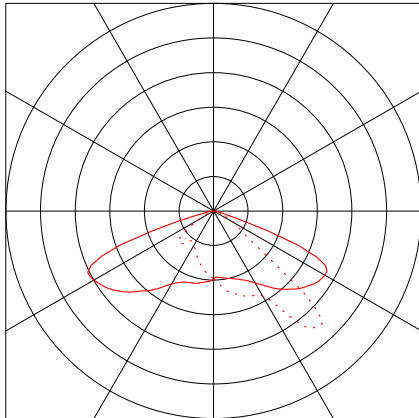
##### Luminaire data

Luminaire efficiency : 100%  
 Luminaire efficacy : 109.73 lm/W  
 Classification : A30 ↓100.0% ↑0.0%  
 CIE Flux Codes : 35 78 97 100 100  
 UGR 4H 8H : 28.5 / 15.5  
 Power : 30 W  
 Luminous flux : 3292 lm

##### Equipped with

Quantity : 1  
 Designation :  
 Colour :  
 Luminous flux : 3292 lm

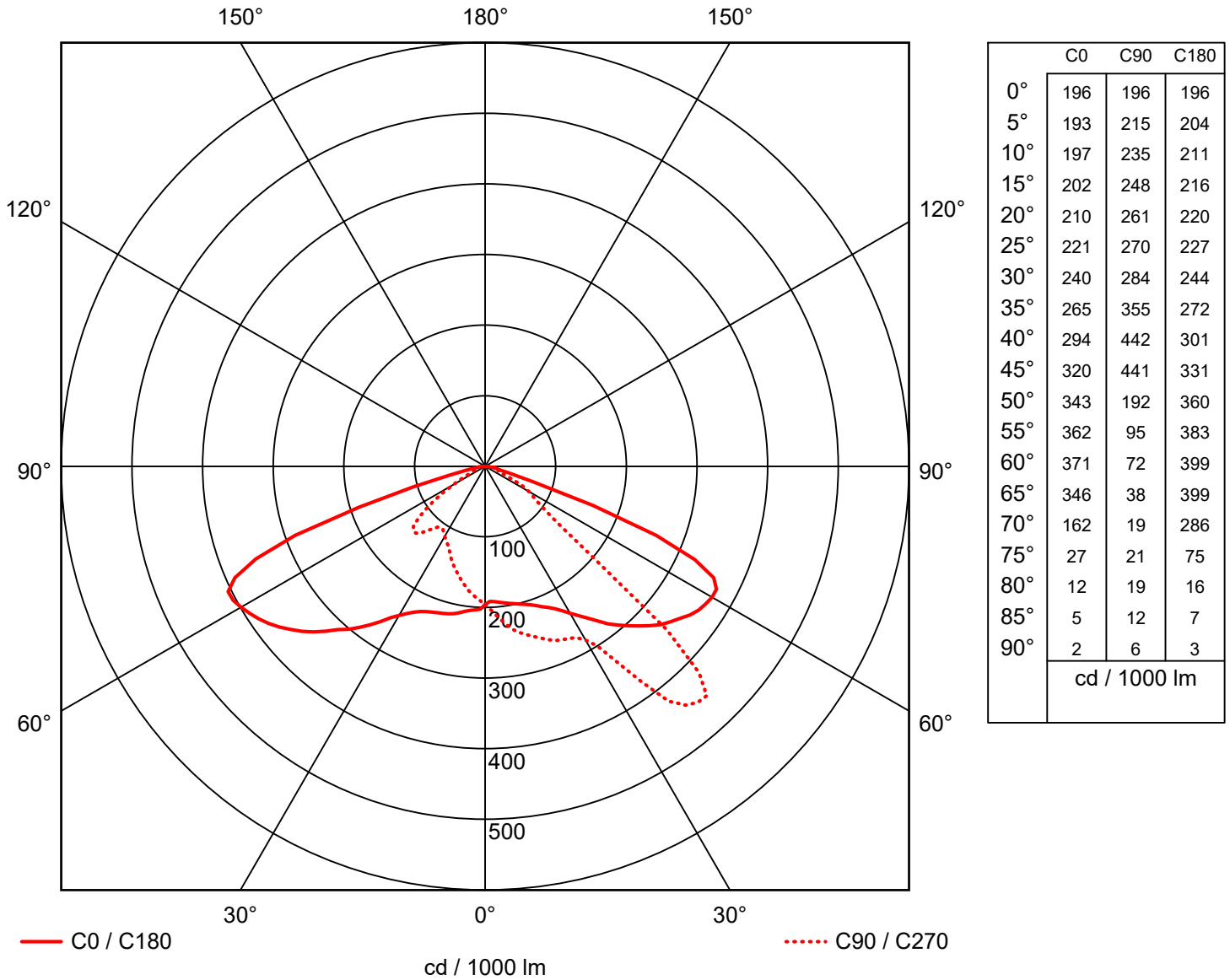
Dimensions : Ø500 mm x 155 mm



Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
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**1.1 (!30w)**

**1.1.2 LDC**



Manufacturer :  
 Order number : !30w  
 Luminaire name :  
 Equipment : 1 x 30 W / 3292 lm  
 Dimensions : D 500 mm x H 155 mm  
 File name : rlx\_20180222144206.ltd

Efficiency factor : 100%  
 Luminaire efficacy : 109.73 lm/W (A30)  
 Light distribution : asymmetric  
 Beam Angle : 67.6° C0  
 48.8° C90  
 70.2° C180  
 -- C270

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
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 Date : 20.03.2018

# 1 Luminaire data

## 1.2 5m\_led 50w ()

### 1.2.1 Data sheet

#### 5m\_led 50w

Luminaire arrangement for:

	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!led-50w :	0.000	0.350	5.000	0	12	0

Position is the LDC position of the luminaire.

#### !led-50w

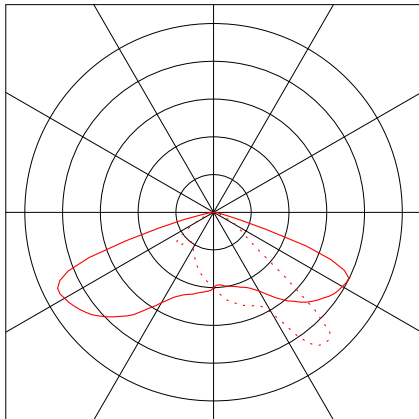
##### Luminaire data

Luminaire efficiency : 100%  
 Luminaire efficacy :  
 Classification : A30 ↓100.0% ↑0.0%  
 CIE Flux Codes : 36 78 97 100 100  
 UGR 4H 8H : 30.1 / 17.0  
 Luminous flux : 4927 lm

##### Equipped with

Quantity : 1  
 Designation :  
 Colour :  
 Luminous flux : 4927 lm

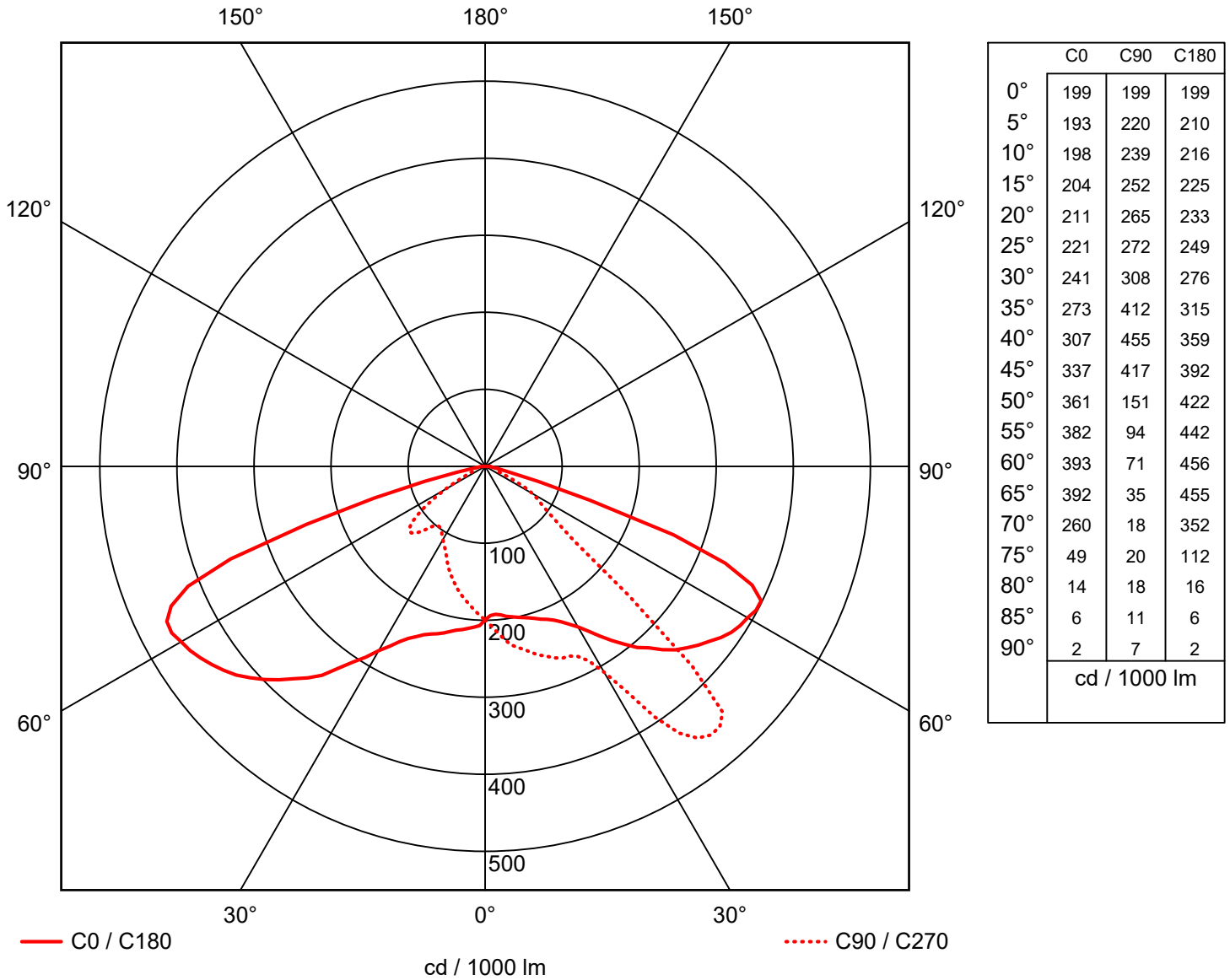
Dimensions : Ø500 mm x 155 mm



Object : 경춘선 숲길 조명시뮬레이션  
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**1.2 (!led-50w)**

**1.2.2 LDC**



Manufacturer :  
 Order number : !led-50w  
 Luminaire name :  
 Equipment : 1 x / 4927 lm  
 Dimensions : D 500 mm x H 155 mm  
 File name : rlx\_20180222145622.ldt

Efficiency factor : 100%  
 Luminaire efficacy : (A30)  
 Light distribution : asymmetric  
 Beam Angle : 69.6° C0  
 47.5° C90  
 71.5° C180  
 -- C270

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

# 1 Luminaire data

## 1.3 5m\_led 30w (2등용) ()

### 1.3.1 Data sheet

#### 5m\_led 30w (2등용)

Luminaire arrangement for:

	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!30w :	0.000	0.350	5.000	0	5	0
!30w :	0.000	-0.350	5.000	180	5	0

Position is the LDC position of the luminaire.

#### !30w

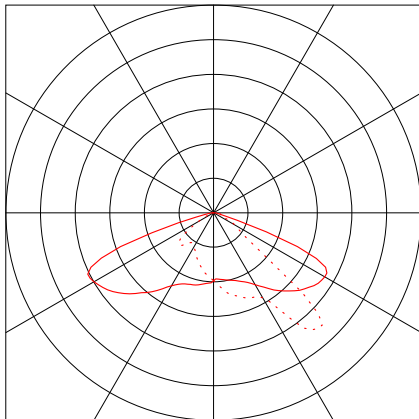
##### Luminaire data

Luminaire efficiency : 100%  
 Luminaire efficacy : 109.73 lm/W  
 Classification : A30 ↓100.0% ↑0.0%  
 CIE Flux Codes : 35 78 97 100 100  
 UGR 4H 8H : 28.5 / 15.5  
 Power : 30 W  
 Luminous flux : 3292 lm

##### Equipped with

Quantity : 1  
 Designation :  
 Colour :  
 Luminous flux : 3292 lm

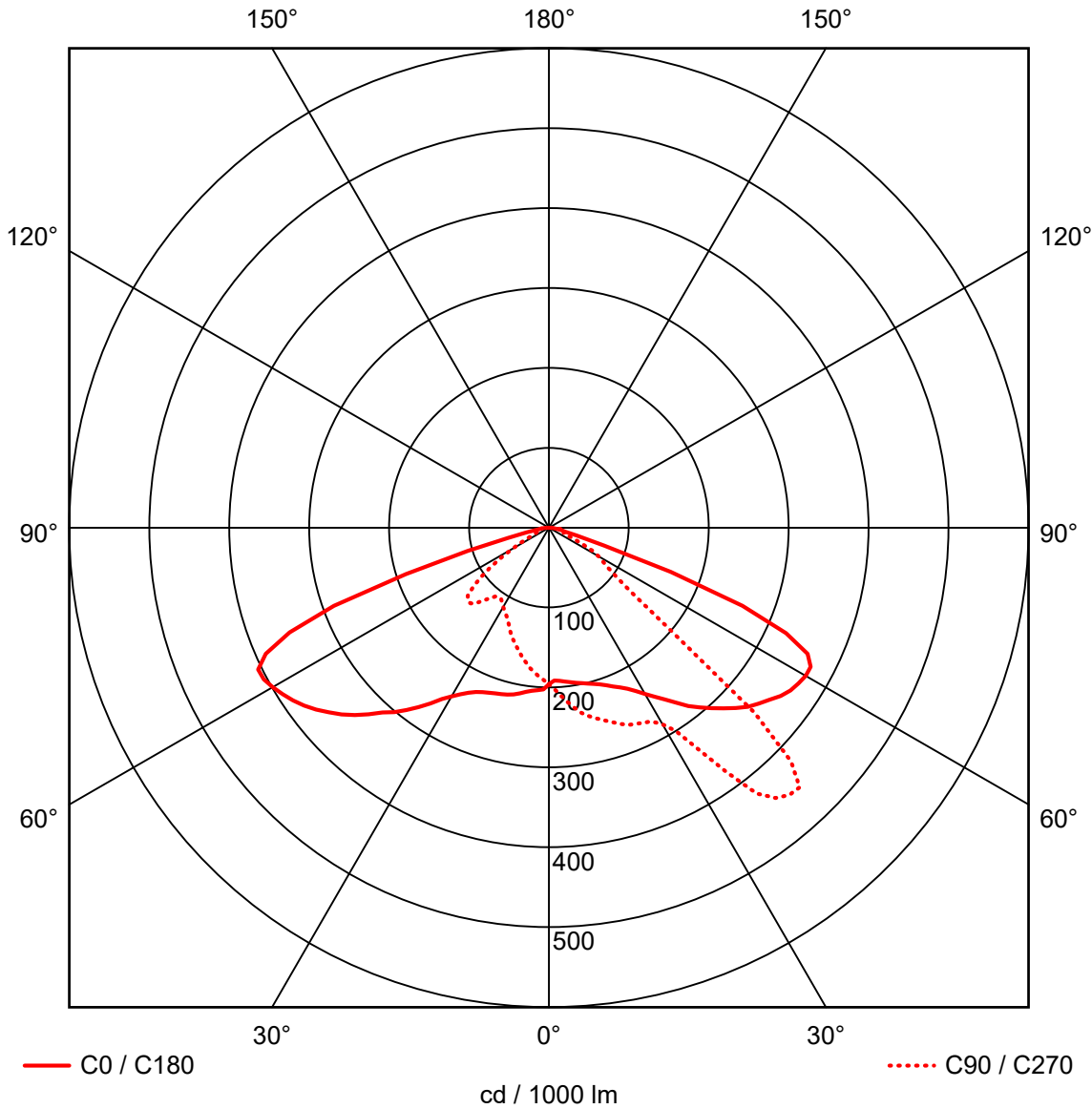
Dimensions : Ø500 mm x 155 mm



Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
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**1.3 (!30w)**

**1.3.2 LDC**



	C0	C90	C180
0°	196	196	196
5°	193	215	204
10°	197	235	211
15°	202	248	216
20°	210	261	220
25°	221	270	227
30°	240	284	244
35°	265	355	272
40°	294	442	301
45°	320	441	331
50°	343	192	360
55°	362	95	383
60°	371	72	399
65°	346	38	399
70°	162	19	286
75°	27	21	75
80°	12	19	16
85°	5	12	7
90°	2	6	3
	cd / 1000 lm		

Manufacturer :  
 Order number : !30w  
 Luminaire name :  
 Equipment : 1 x 30 W / 3292 lm  
 Dimensions : D 500 mm x H 155 mm  
 File name : rlx\_20180222144206.ltd

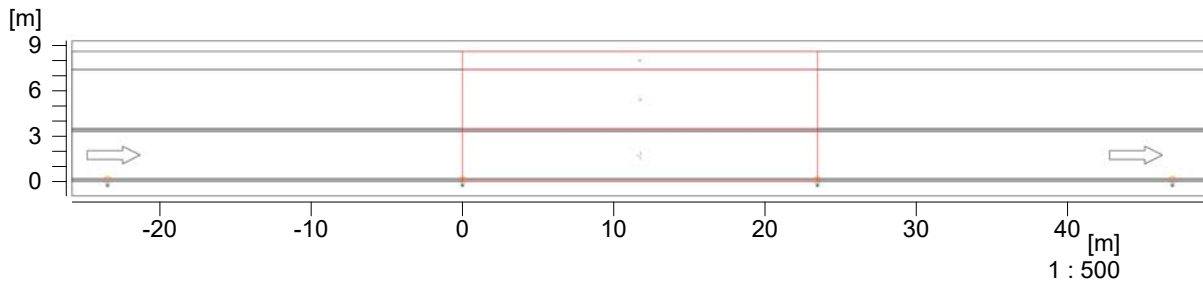
Efficiency factor : 100%  
 Luminaire efficacy : 109.73 lm/W (A30)  
 Light distribution : asymmetric  
 Beam Angle : 67.6° C0  
 48.8° C90  
 70.2° C180  
 -- C270

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 2 경춘선 숲길\_ LED 30W

### 2.1 Description, 경춘선 숲길\_ LED 30W

#### 2.1.1 Floor plan



자전거도로		Type of mast	:5m_led 30w
Road layout	: without central reservation	Luminaire placing	: Right row
Width of roadway	: 3.50 m	photometric centre height	: 5.00 m
No. of lanes	: 1	Distance between masts	: 23.45 m
Road surface category	: R3	Kerb distance	: 0.25 m
q0	: 0.07	Inclination	: 5.00°

Luminaire arrangement for:

5m_led 30w	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!30w :	0.00	0.35	5.00	0	5	0

Border areas: =>



Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
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## 2 경춘선 숲길\_ LED 30W

### 2.1 Description, 경춘선 숲길\_ LED 30W

#### 2.1.1 Floor plan

---

##### Border areas:

###### 기차길

Road layout : General surface  
Width of roadway : 3.90 m  
No. of lanes : 1  
Kerb distance : 0.00 m

###### 산책로

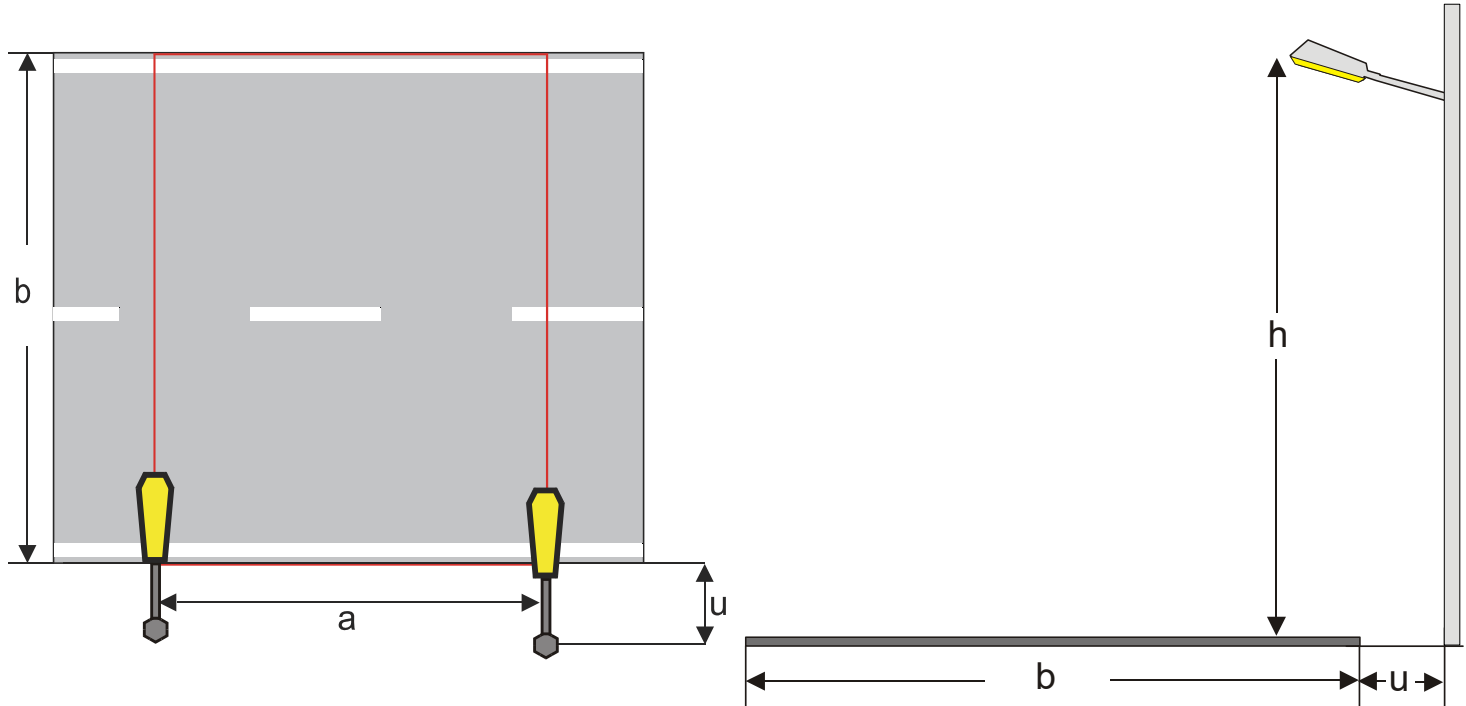
Road layout : General surface  
Width of roadway : 1.20 m  
No. of lanes : 1  
Kerb distance : 3.90 m

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
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 Date : 20.03.2018

## 2 경춘선 숲길\_ LED 30W

### 2.2 Summary, 경춘선 숲길\_ LED 30W

#### 2.2.1 Result overview, 자전거도로



#### Luminaire data

Manufacturer :  
 Order No. : 5m\_led 30w  
 Luminaire name : 5m\_led 30w  
 Equipment : 1 x 30 W / 3292 lm

Road layout : without central reservation  
 Width of roadway (b): 3.50 m  
 No. of lanes : 1  
 Road surface category : R3  
 $q_0$  : 0.07  
 Right hand drivers

Luminaire placing : Right row  
 photometric centre height.(h): 5.00 m  
 Distance between masts (a): 23.45 m  
 Kerb distance (u): 0.25 m  
 Inclination ( $\delta$ ): 5.00°  
 Maintenance factor : 0.75

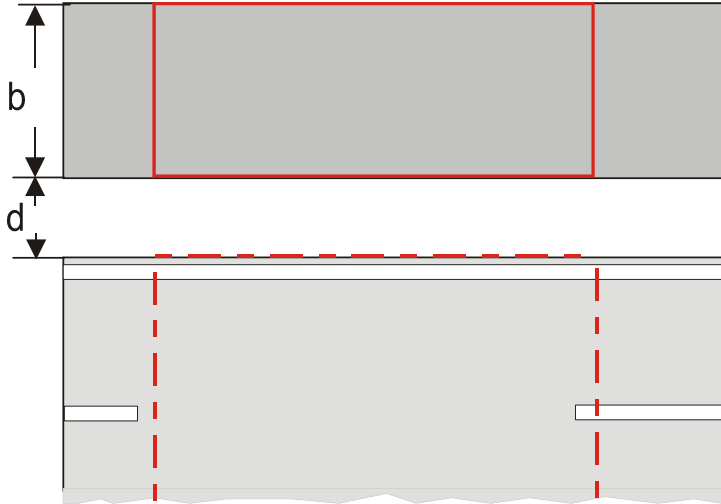
#### Horizontal illuminance E

Average : 11.6 lx  
 Minimum : 4.2 lx  
 Maximum : 19.7 lx  
 Min / average : 0.37

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 2.2 Summary, 경춘선 숲길\_ LED 30W

### 2.2.2 Result overview, 기차길



Border areas : General surface See road overview  
Width of roadway (b): 3.90 m  
Kerb distance (d): 0.00 m

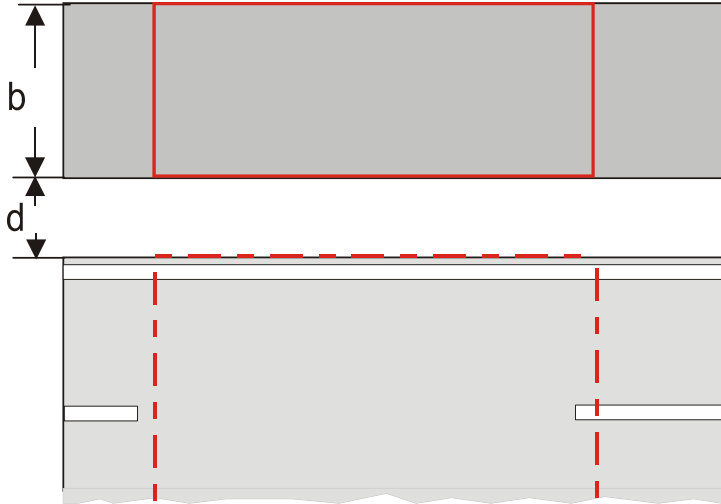
#### Horizontal illuminance E

Average : 8.1 lx  
Minimum : 3.2 lx  
Maximum : 15.9 lx  
Min / average : 0.4

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
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## 2.2 Summary, 경춘선 숲길\_ LED 30W

### 2.2.3 Result overview, 산책로



Border areas : General surface See road overview  
Width of roadway (b): 1.20 m  
Kerb distance (d): 3.90 m

#### Horizontal illuminance E

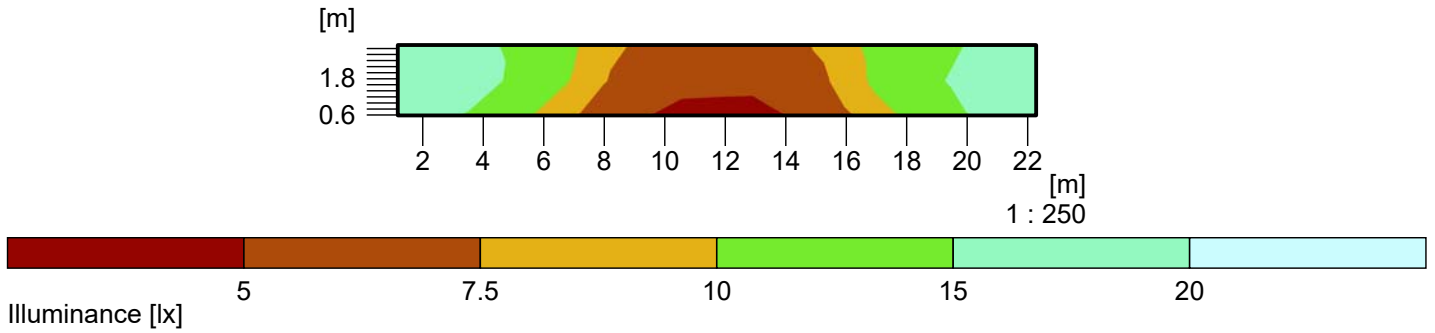
Average : 2.13 lx  
Minimum : 1.48 lx  
Maximum : 3.11 lx  
Min / average : 0.7

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
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## 2 경춘선 숲길\_ LED 30W

### 2.3 Calculation results, 경춘선 숲길\_ LED 30W

#### 2.3.1 Pseudo colours, 자전거도로 (E horizontal)



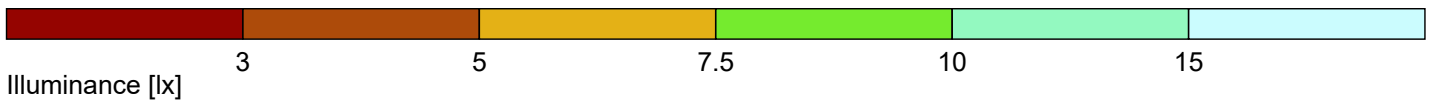
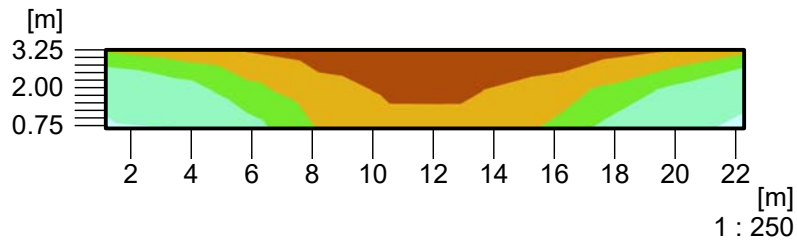
Height of the reference plane

Average illuminance	Eav	: 11.6 lx
Minimum illuminance	Emin	: 4.2 lx
Maximum illuminance	Emax	: 19.7 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.73 (0.37)
Diversity U <sub>d</sub>	min/max	: 1 : 4.64 (0.22)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 2.3 Calculation results, 경춘선 숲길\_ LED 30W

### 2.3.2 Pseudo colours, 기차길 (E horizontal)



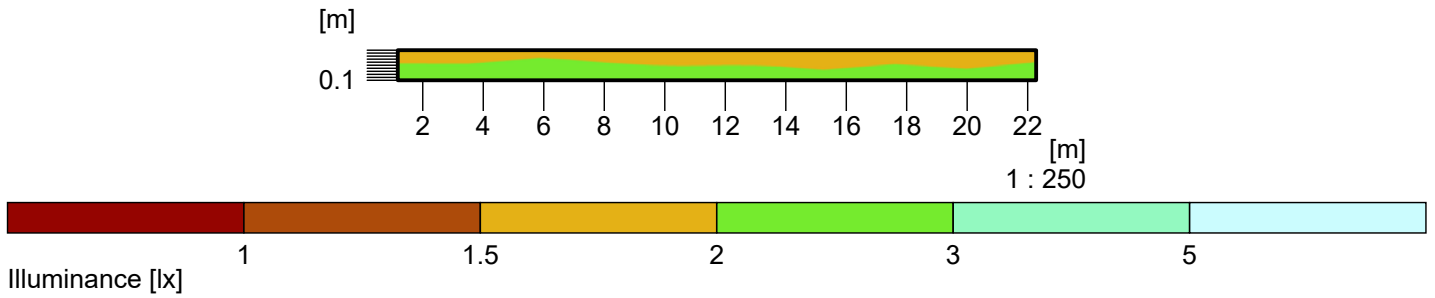
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 8.1 lx
Minimum illuminance	Emin	: 3.2 lx
Maximum illuminance	Emax	: 15.9 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.52 (0.4)
Diversity U <sub>d</sub>	min/max	: 1 : 4.93 (0.2)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 2.3 Calculation results, 경춘선 숲길\_ LED 30W

### 2.3.3 Pseudo colours, 산책로 (E horizontal)



Height of the reference plane

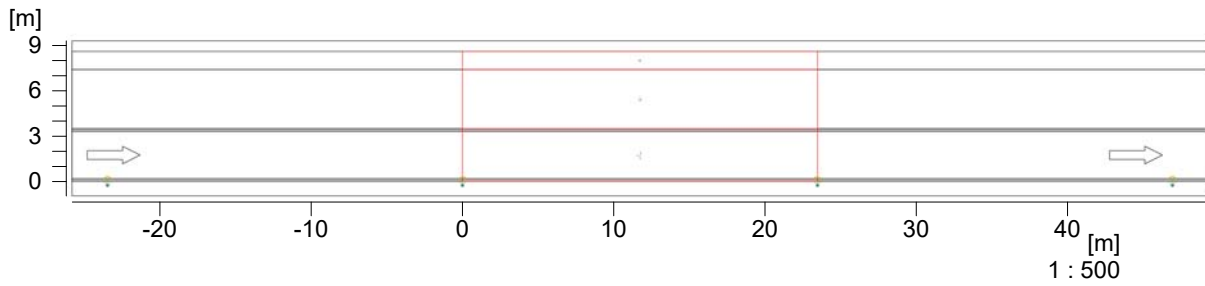
		: 0.00 m
Average illuminance	Eav	: 2.13 lx
Minimum illuminance	Emin	: 1.48 lx
Maximum illuminance	Emax	: 3.11 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 1.44 (0.7)
Diversity U <sub>d</sub>	min/max	: 1 : 2.1 (0.48)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
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 Date : 20.03.2018

### 3 경춘선 숲길\_ LED 50W

#### 3.1 Description, 경춘선 숲길\_ LED 50W

##### 3.1.1 Floor plan



자전거도로		Type of mast	:5m_led 50w
Road layout	: without central reservation	Luminaire placing	: Right row
Width of roadway	: 3.50 m	photometric centre height	: 5.00 m
No. of lanes	: 1	Distance between masts	: 23.45 m
Road surface category	: R3	Kerb distance	: 0.25 m
q0	: 0.07	Inclination	: 12.00°

Luminaire arrangement for:

5m_led 50w	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!!led-50w :	0.00	0.35	5.00	0	12	0

Border areas: =>



Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

### 3 경춘선 숲길\_ LED 50W

#### 3.1 Description, 경춘선 숲길\_ LED 50W

##### 3.1.1 Floor plan

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Border areas:

기차길

Road layout : General surface  
Width of roadway : 3.90 m  
No. of lanes : 1  
Kerb distance : 0.00 m

산책로

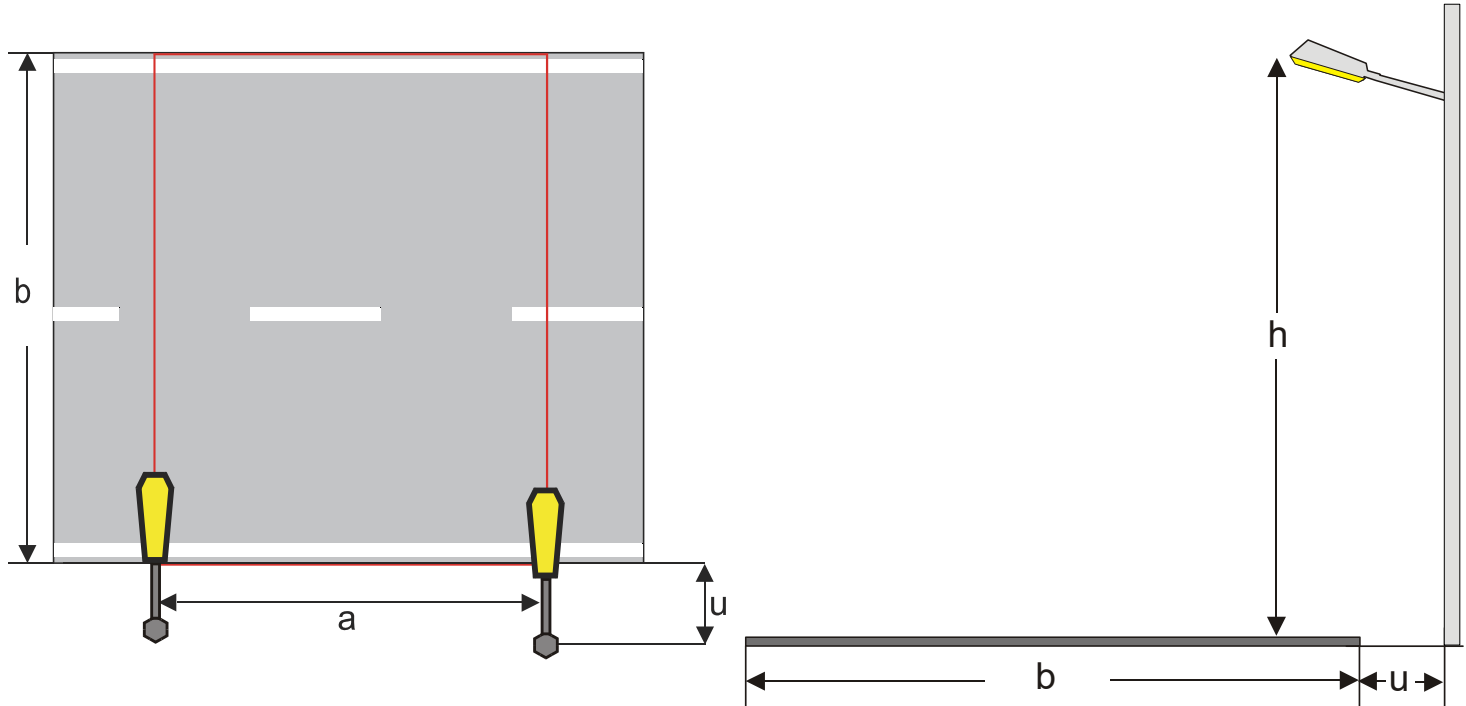
Road layout : General surface  
Width of roadway : 1.20 m  
No. of lanes : 1  
Kerb distance : 3.90 m

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

### 3 경춘선 숲길\_ LED 50W

#### 3.2 Summary, 경춘선 숲길\_ LED 50W

##### 3.2.1 Result overview, 자전거도로



#### Luminaire data

Manufacturer :  
 Order No. : 5m\_led 50w  
 Luminaire name : 5m\_led 50w  
 Equipment : 1 x / 4927 lm

Road layout : without central reservation  
 Width of roadway (b): 3.50 m  
 No. of lanes : 1  
 Road surface category : R3  
 q0 : 0.07  
 Right hand drivers

Luminaire placing : Right row  
 photometric centre height.(h): 5.00 m  
 Distance between masts (a): 23.45 m  
 Kerb distance (u): 0.25 m  
 Inclination (δ): 12.00°  
 Maintenance factor : 0.75

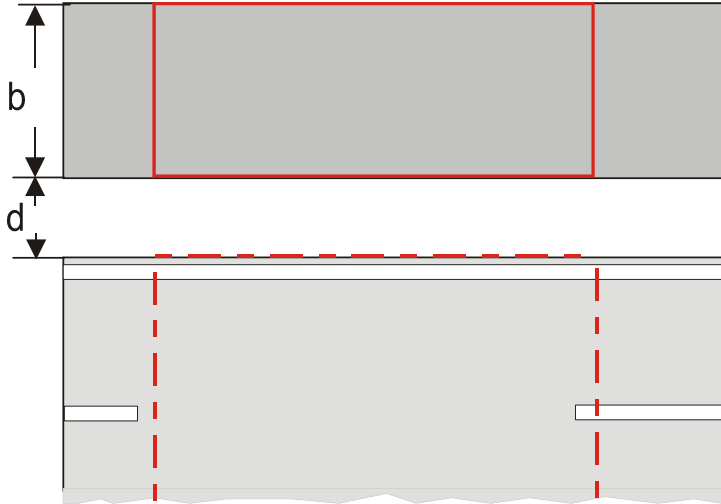
#### Horizontal illuminance E

Average : 16.3 lx  
 Minimum : 6.3 lx  
 Maximum : 28.3 lx  
 Min / average : 0.38

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

### 3.2 Summary, 경춘선 숲길\_ LED 50W

#### 3.2.2 Result overview, 기차길



Border areas : General surface See road overview  
Width of roadway (b): 3.90 m  
Kerb distance (d): 0.00 m

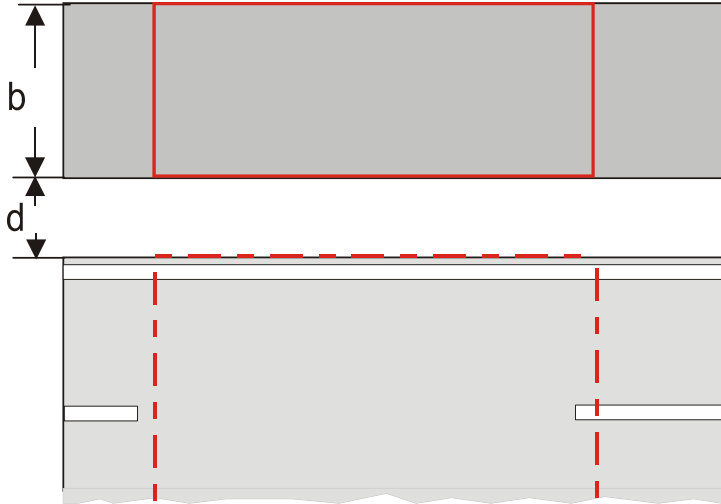
#### Horizontal illuminance E

Average : 12.5 lx  
Minimum : 5.7 lx  
Maximum : 20.1 lx  
Min / average : 0.46

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 3.2 Summary, 경춘선 숲길\_ LED 50W

### 3.2.3 Result overview, 산책로



Border areas : General surface See road overview  
Width of roadway (b): 1.20 m  
Kerb distance (d): 3.90 m

#### Horizontal illuminance E

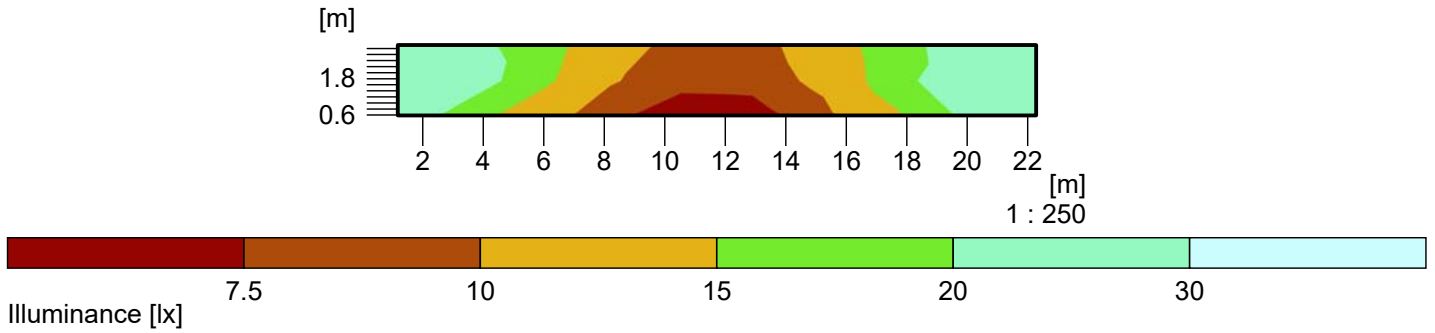
Average : 6.4 lx  
Minimum : 3.6 lx  
Maximum : 12 lx  
Min / average : 0.56

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

### 3 경춘선 숲길\_ LED 50W

#### 3.3 Calculation results, 경춘선 숲길\_ LED 50W

##### 3.3.1 Pseudo colours, 자전거도로 (E horizontal)



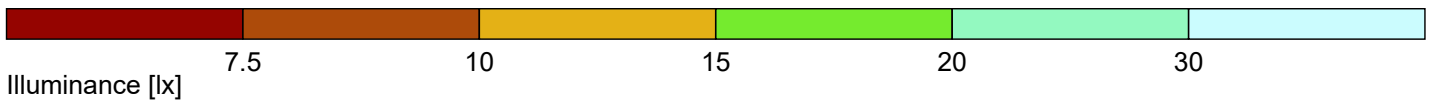
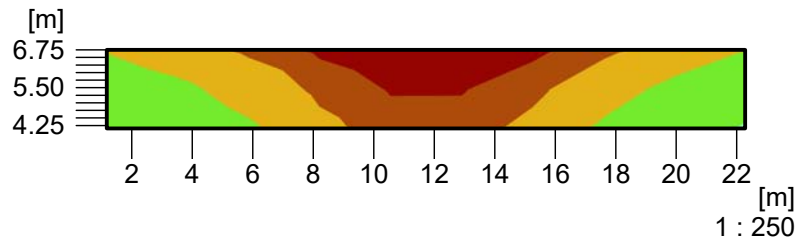
Height of the reference plane

Average illuminance	Eav	: 0.00 m
Minimum illuminance	Emin	: 16.3 lx
Maximum illuminance	Emax	: 6.3 lx
Uniformity Uo	min/average	: 28.3 lx
Diversity Ud	min/max	: 1 : 2.6 (0.38)
		: 1 : 4.53 (0.22)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

### 3.3 Calculation results, 경춘선 숲길\_ LED 50W

#### 3.3.2 Pseudo colours, 기차길 (E horizontal)



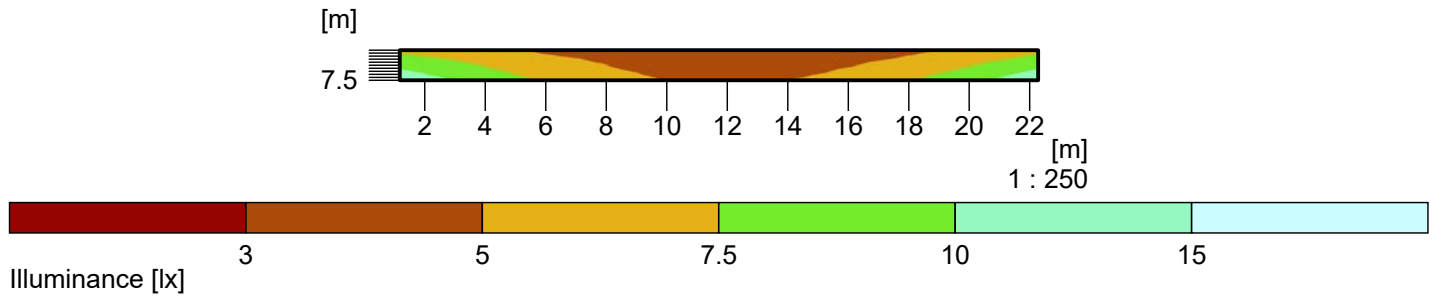
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 12.5 lx
Minimum illuminance	Emin	: 5.7 lx
Maximum illuminance	E <sub>max</sub>	: 20.1 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.2 (0.46)
Diversity U <sub>d</sub>	min/max	: 1 : 3.53 (0.28)

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

### 3.3 Calculation results, 경춘선 숲길\_ LED 50W

#### 3.3.3 Pseudo colours, 산책로 (E horizontal)



Height of the reference plane

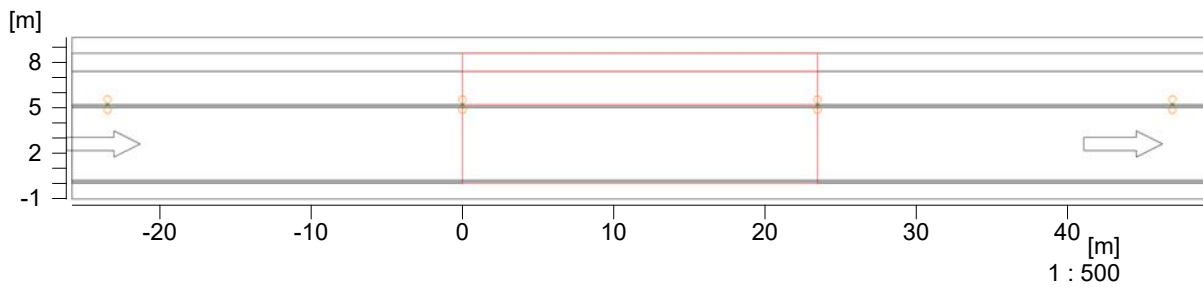
Average illuminance	Eav	: 6.4 lx
Minimum illuminance	Emin	: 3.6 lx
Maximum illuminance	Emax	: 12 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 1.78 (0.56)
Diversity U <sub>d</sub>	min/max	: 1 : 3.37 (0.3)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 4 경춘선 숲길\_ LED 30W (2등용)

### 4.1 Description, 경춘선 숲길\_ LED 30W (2등용)

#### 4.1.1 Floor plan



자전거도로		Type of mast	: 5m_led 30w (2등용)
Road layout	: without central reservation	Luminaire placing	: Left row
Width of roadway	: 5.20 m	photometric centre height	: 5.00 m
No. of lanes	: 1	Distance between masts	: 23.45 m
Road surface category	: R3	Kerb distance	: 0.00 m
q0	: 0.07	Inclination	: 5.00°

Luminaire arrangement for:

5m_led 30w (2등용)	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!30w :	0.00	0.35	5.00	0	5	0
!30w :	0.00	-0.35	5.00	180	5	0

Border areas: =>



Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 4 경춘선 숲길\_ LED 30W (2등용)

### 4.1 Description, 경춘선 숲길\_ LED 30W (2등용)

#### 4.1.1 Floor plan

---

Border areas:

기차길

Road layout : General surface  
Width of roadway : 2.20 m  
No. of lanes : 1  
Kerb distance : 0.00 m

산책로

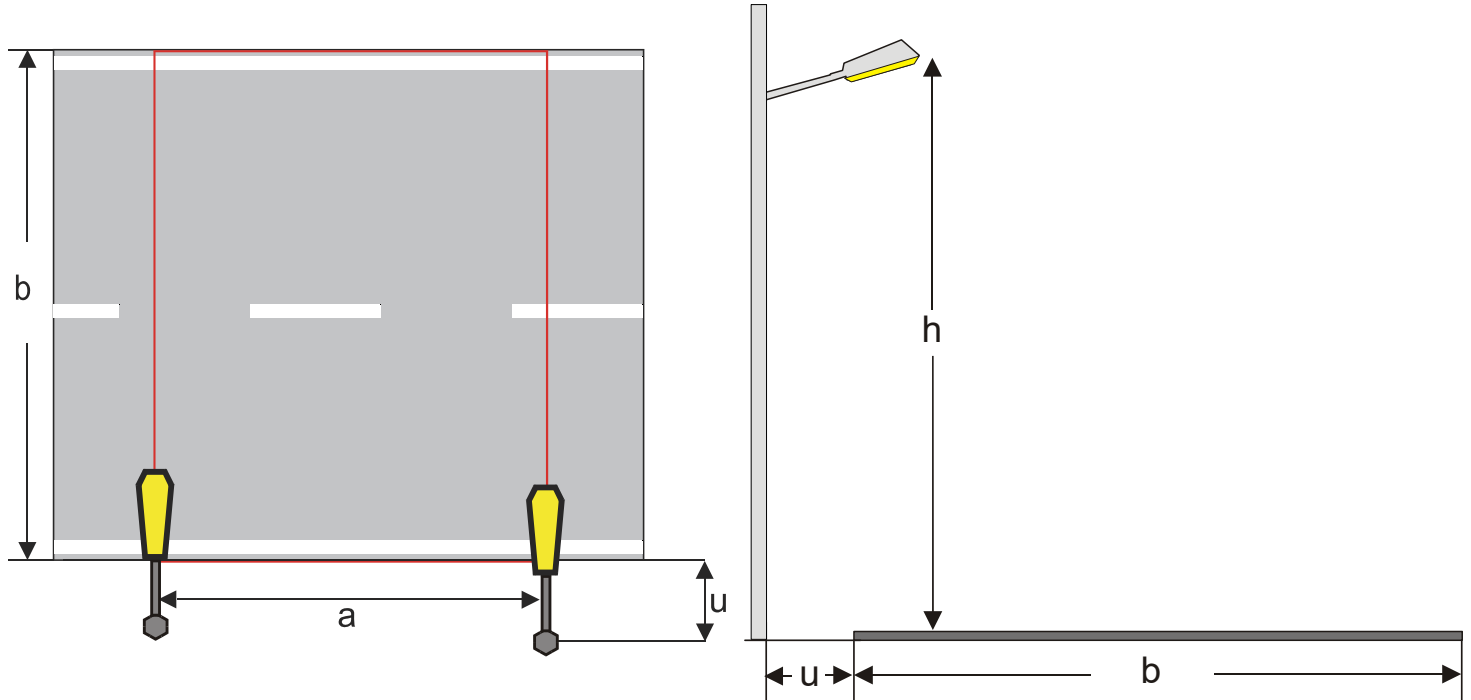
Road layout : General surface  
Width of roadway : 1.20 m  
No. of lanes : 1  
Kerb distance : 2.20 m

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 4 경춘선 숲길\_ LED 30W (2등용)

### 4.2 Summary, 경춘선 숲길\_ LED 30W (2등용)

#### 4.2.1 Result overview, 자전거도로



#### Luminaire data

Manufacturer :  
 Order No. : 5m\_led 30w (2등용)  
 Luminaire name : 5m\_led 30w (2등용)

Road layout : without central reservation  
 Width of roadway (b): 5.20 m  
 No. of lanes : 1  
 Road surface category : R3  
 q0 : 0.07  
 Right hand drivers

Luminaire placing : Left row  
 photometric centre height.(h): 5.00 m  
 Distance between masts (a): 23.45 m  
 Kerb distance (u): 0.00 m  
 Inclination (δ): 5.00°  
 Maintenance factor : 0.75

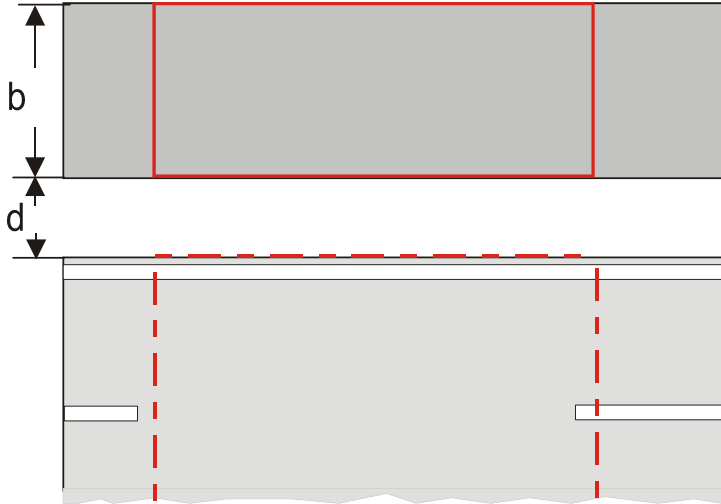
#### Horizontal illuminance E

Average : 15.3 lx  
 Minimum : 5.7 lx  
 Maximum : 31.4 lx  
 Min / average : 0.37

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 4.2 Summary, 경춘선 숲길\_ LED 30W (2등용)

### 4.2.2 Result overview, 기차길



Border areas : General surface See road overview  
Width of roadway (b): 2.20 m  
Kerb distance (d): 0.00 m

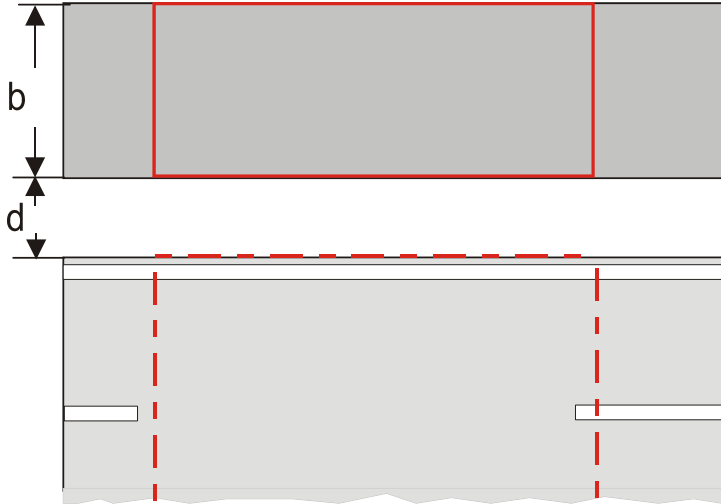
#### Horizontal illuminance E

Average : 16.8 lx  
Minimum : 5.9 lx  
Maximum : 31.6 lx  
Min / average : 0.35

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

**4.2 Summary, 경춘선 숲길\_ LED 30W (2등용)**

**4.2.3 Result overview, 산책로**



Border areas : General surface See road overview  
 Width of roadway (b): 1.20 m  
 Kerb distance (d): 2.20 m

**Horizontal illuminance E**

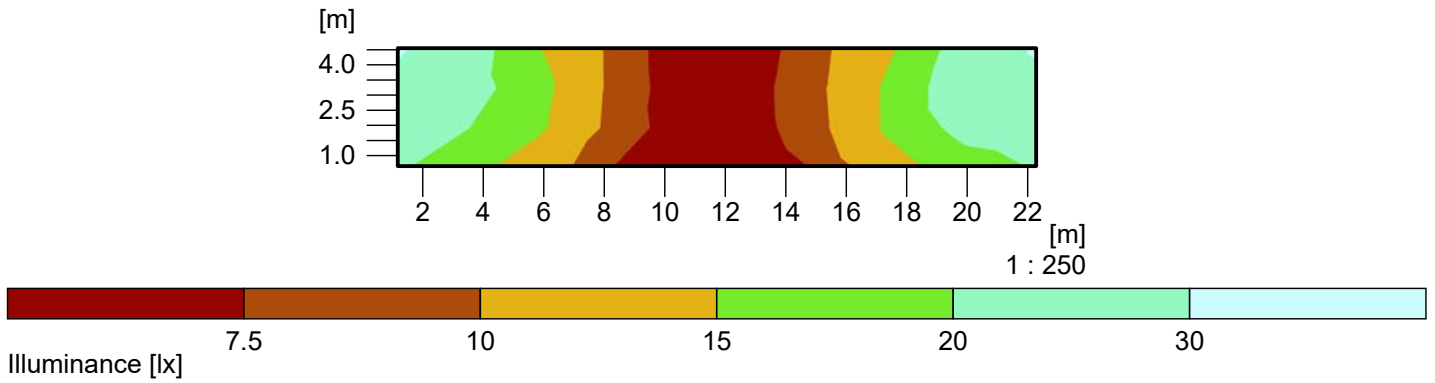
Average : 15.7 lx  
 Minimum : 6.2 lx  
 Maximum : 26.1 lx  
 Min / average : 0.4

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 4 경춘선 숲길\_ LED 30W (2등용)

### 4.3 Calculation results, 경춘선 숲길\_ LED 30W (2등용)

#### 4.3.1 Pseudo colours, 자전거도로 (E horizontal)



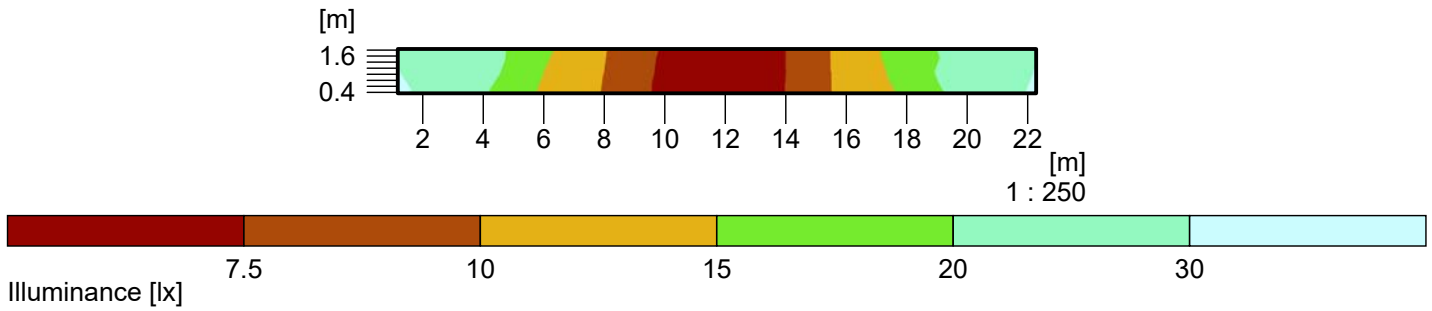
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 15.3 lx
Minimum illuminance	Emin	: 5.7 lx
Maximum illuminance	E <sub>max</sub>	: 31.4 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.67 (0.37)
Diversity U <sub>d</sub>	min/max	: 1 : 5.47 (0.18)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

### 4.3 Calculation results, 경춘선 숲길\_ LED 30W (2등용)

#### 4.3.2 Pseudo colours, 기차길 (E horizontal)



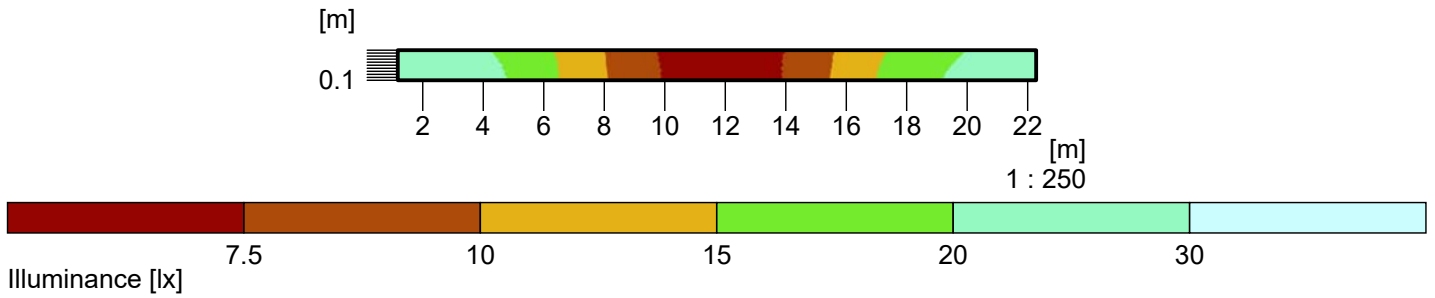
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 16.8 lx
Minimum illuminance	Emin	: 5.9 lx
Maximum illuminance	Emax	: 31.6 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.85 (0.35)
Diversity U <sub>d</sub>	min/max	: 1 : 5.37 (0.19)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

### 4.3 Calculation results, 경춘선 숲길\_ LED 30W (2등용)

#### 4.3.3 Pseudo colours, 산책로 (E horizontal)



#### Height of the reference plane

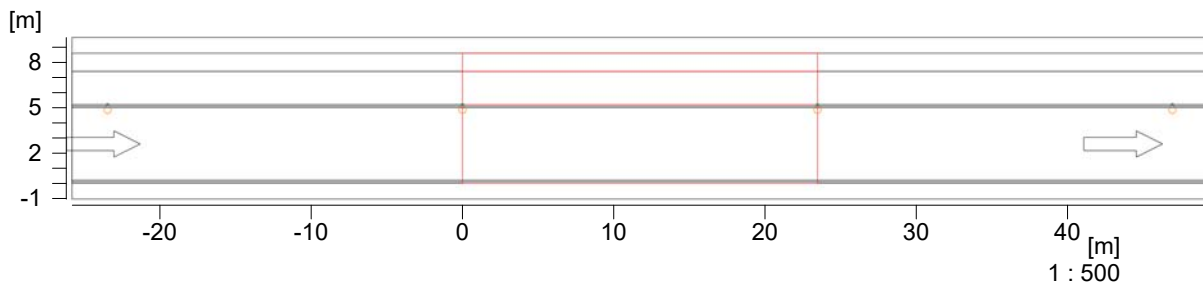
		: 0.00 m
Average illuminance	Eav	: 15.7 lx
Minimum illuminance	Emin	: 6.2 lx
Maximum illuminance	Emax	: 26.1 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.52 (0.4)
Diversity U <sub>d</sub>	min/max	: 1 : 4.18 (0.24)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 5 경춘선 숲길\_ LED 30W (1등용)

### 5.1 Description, 경춘선 숲길\_ LED 30W (1등용)

#### 5.1.1 Floor plan



자전거도로		Type of mast	:5m_led 30w
Road layout	: without central reservation	Luminaire placing	: Left row
Width of roadway	: 5.20 m	photometric centre height	: 5.00 m
No. of lanes	: 1	Distance between masts	: 23.45 m
Road surface category	: R3	Kerb distance	: 0.00 m
q0	: 0.07	Inclination	: 5.00°

Luminaire arrangement for:

5m_led 30w	Position			Rotation		
	x[m]	y[m]	z[m]	Z[°]	C0[°]	C90[°]
!30w :	0.00	0.35	5.00	0	5	0

Border areas: =>



Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 5 경춘선 숲길\_ LED 30W (1등용)

### 5.1 Description, 경춘선 숲길\_ LED 30W (1등용)

#### 5.1.1 Floor plan

---

##### Border areas:

###### 기차길

Road layout : General surface  
Width of roadway : 2.20 m  
No. of lanes : 1  
Kerb distance : 0.00 m

###### 산책로

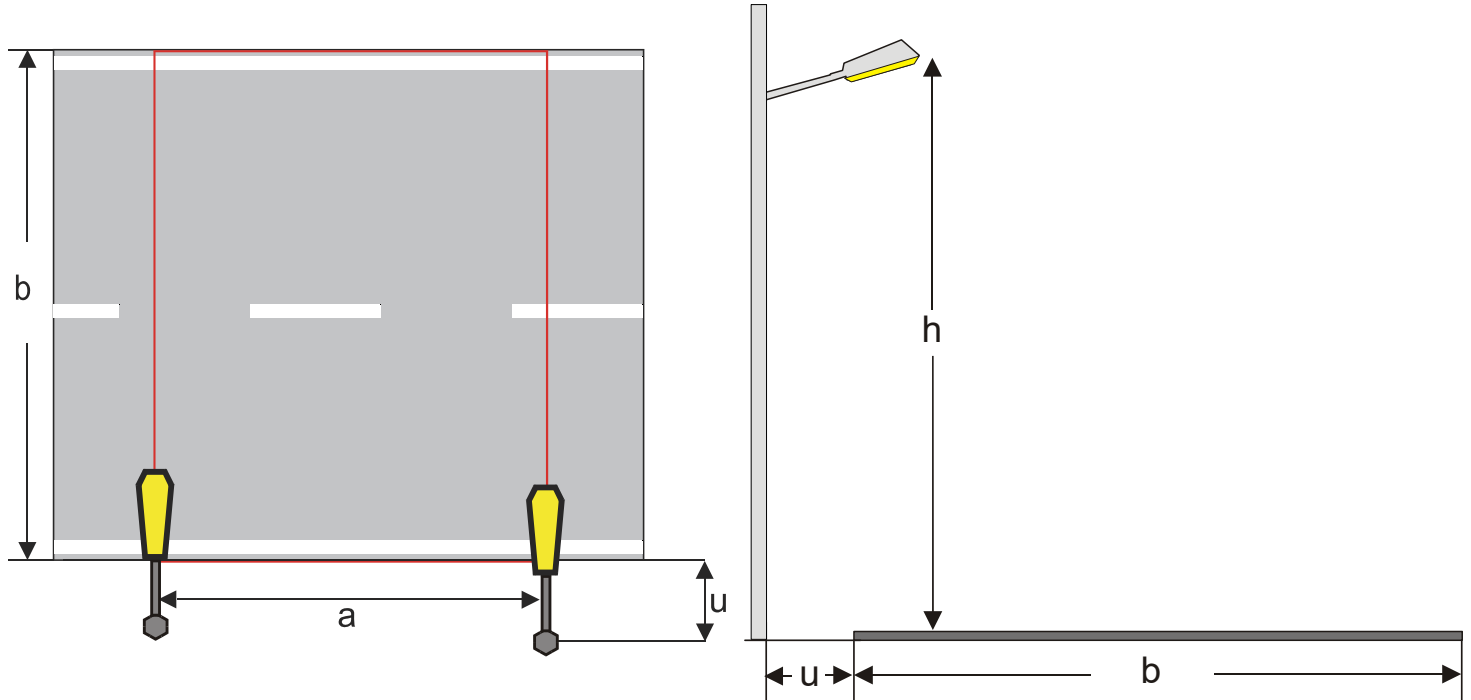
Road layout : General surface  
Width of roadway : 1.20 m  
No. of lanes : 1  
Kerb distance : 2.20 m

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 5 경춘선 숲길\_ LED 30W (1등용)

### 5.2 Summary, 경춘선 숲길\_ LED 30W (1등용)

#### 5.2.1 Result overview, 자전거도로



#### Luminaire data

Manufacturer :  
 Order No. : 5m\_led 30w  
 Luminaire name : 5m\_led 30w  
 Equipment : 1 x 30 W / 3292 lm

Road layout : without central reservation  
 Width of roadway (b): 5.20 m  
 No. of lanes : 1  
 Road surface category : R3  
 q0 : 0.07  
 Right hand drivers

Luminaire placing : Left row  
 photometric centre height.(h): 5.00 m  
 Distance between masts (a): 23.45 m  
 Kerb distance (u): 0.00 m  
 Inclination (δ): 5.00°  
 Maintenance factor : 0.75

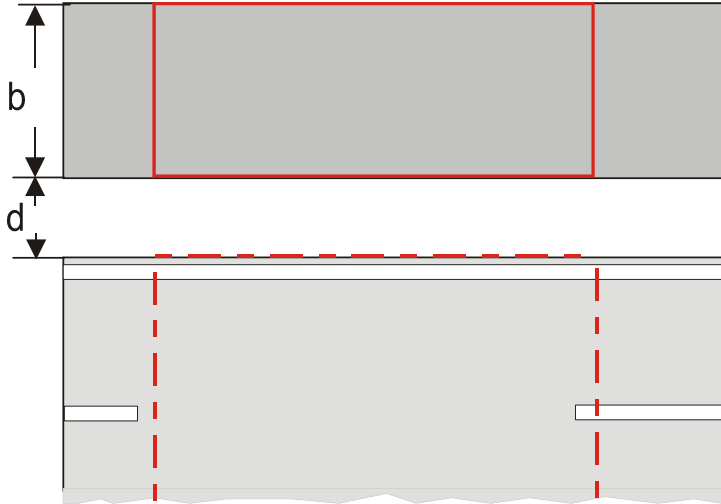
#### Horizontal illuminance E

Average : 11.2 lx  
 Minimum : 4 lx  
 Maximum : 19.8 lx  
 Min / average : 0.36

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 5.2 Summary, 경춘선 숲길\_ LED 30W (1등용)

### 5.2.2 Result overview, 기차길



Border areas : General surface See road overview  
Width of roadway (b): 2.20 m  
Kerb distance (d): 0.00 m

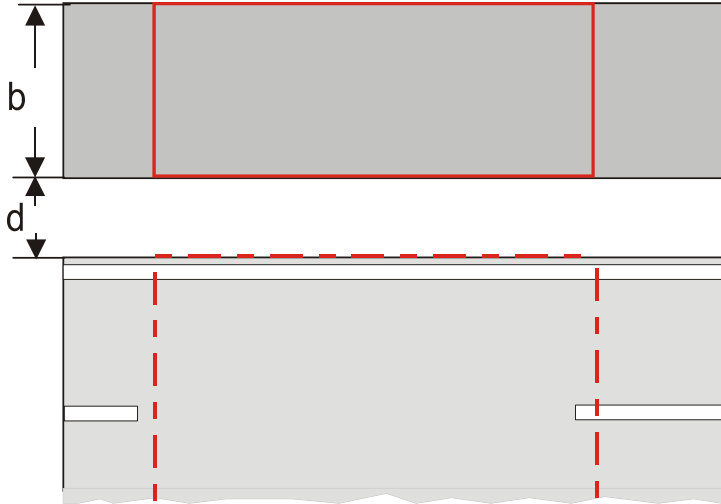
#### Horizontal illuminance E

Average : 5.9 lx  
Minimum : 0.7 lx  
Maximum : 14.9 lx  
Min / average : 0.11

Object : 경춘선 숲길 조명시뮬레이션  
Installation :  
Project number : rev04  
Date : 20.03.2018

## 5.2 Summary, 경춘선 숲길\_ LED 30W (1등용)

### 5.2.3 Result overview, 산책로



Border areas : General surface See road overview  
Width of roadway (b): 1.20 m  
Kerb distance (d): 2.20 m

#### Horizontal illuminance E

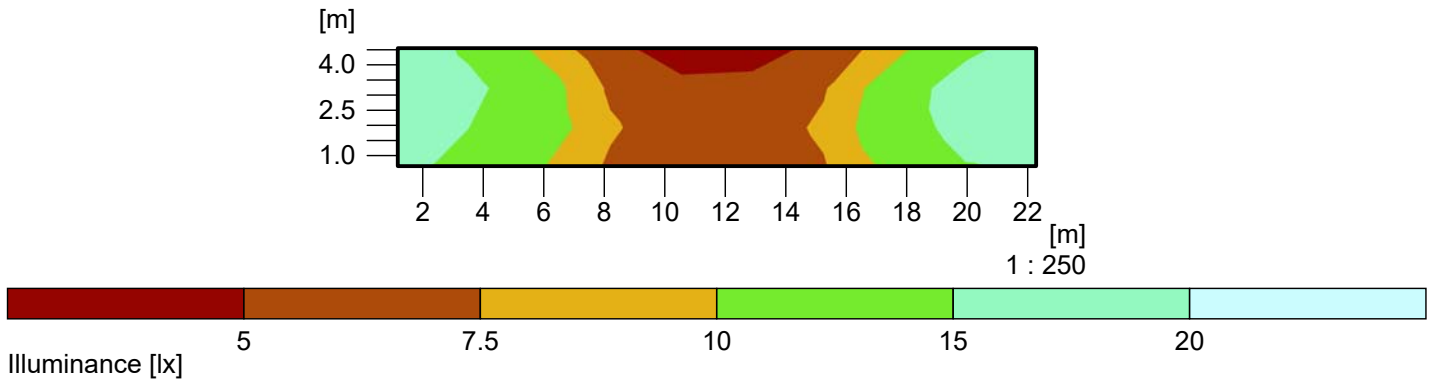
Average : 3.59 lx  
Minimum : 0.29 lx  
Maximum : 6.86 lx  
Min / average : 0.08

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

## 5 경춘선 숲길\_ LED 30W (1등용)

### 5.3 Calculation results, 경춘선 숲길\_ LED 30W (1등용)

#### 5.3.1 Pseudo colours, 자전거도로 (E horizontal)



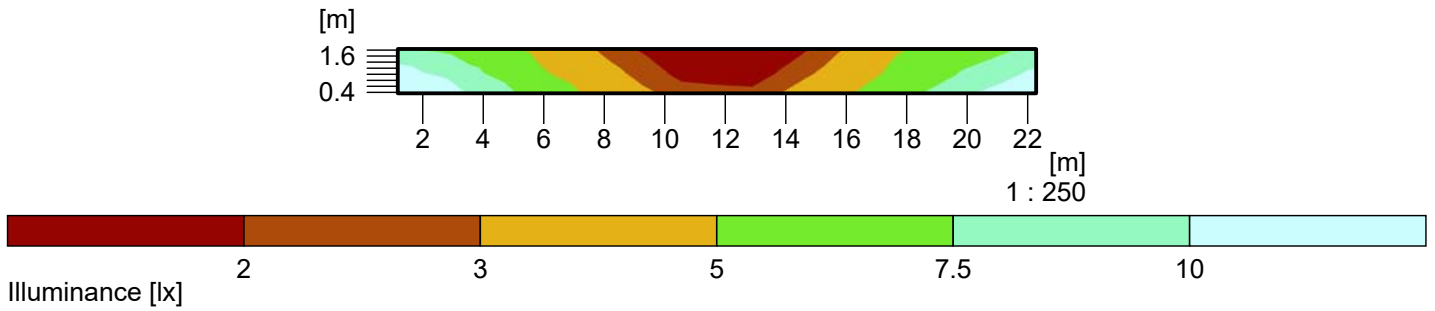
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 11.2 lx
Minimum illuminance	Emin	: 4 lx
Maximum illuminance	Emax	: 19.8 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 2.81 (0.36)
Diversity U <sub>d</sub>	min/max	: 1 : 4.96 (0.2)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

**5.3 Calculation results, 경춘선 숲길\_ LED 30W (1등용)**

**5.3.2 Pseudo colours, 기차길 (E horizontal)**



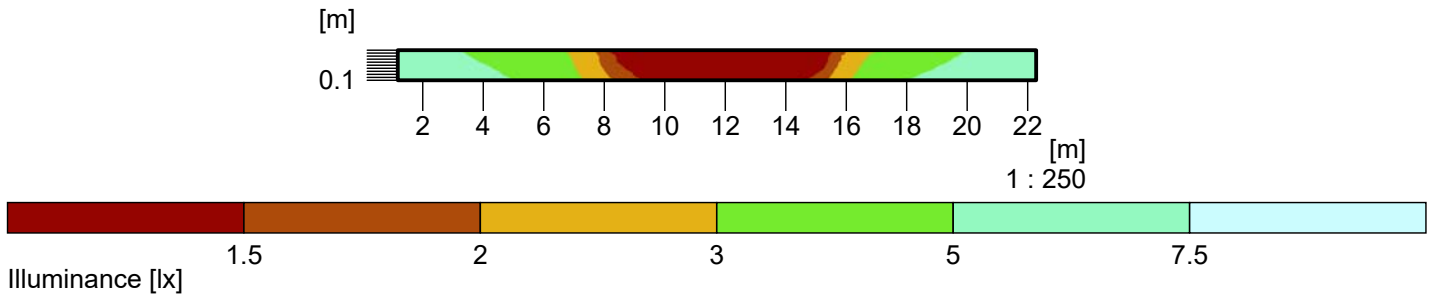
Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 5.9 lx
Minimum illuminance	Emin	: 0.7 lx
Maximum illuminance	Emax	: 14.9 lx
Uniformity Uo	min/average	: 1 : 8.75 (0.11)
Diversity Ud	min/max	: 1 : 22.2 (0.05)

Object : 경춘선 숲길 조명시뮬레이션  
 Installation :  
 Project number : rev04  
 Date : 20.03.2018

### 5.3 Calculation results, 경춘선 숲길\_ LED 30W (1등용)

#### 5.3.3 Pseudo colours, 산책로 (E horizontal)



Height of the reference plane

		: 0.00 m
Average illuminance	Eav	: 3.59 lx
Minimum illuminance	Emin	: 0.29 lx
Maximum illuminance	Emax	: 6.86 lx
Uniformity U <sub>0</sub>	min/average	: 1 : 12.3 (0.08)
Diversity U <sub>d</sub>	min/max	: 1 : 23.5 (0.04)