

The Glade of Light

Installation : Exterior

Project number : VE 606528

Customer :

Processed by : fStr / DWa

Date : 01.04.2021

Project description:

Luminaires:

- Olivio Medio with Honeycomb Louvre (towards inner area) | 6m poles | 3.000K
- Olivio Flood for path illumination | 6m poles | 3.000K

Glade: Inner area: Subtle illumination of trees and bench

Glade: Outer area / pathway: Illumination of path | E[m] = 5.5 – 7.5lx

Revision (03.07.2020) :: Added some planning details | referring to winter scene

Revision (07.07.2020) :: Added opal luminaires in wall along river

Revision (28.07.2020) :: Added pathway to inner city with additional luminaires

Revision (29.03.2021) :: Added luminance export and river illuminance calculation values

Revision (01.04.2021) :: Adjusted height of river calculation surface

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

selux

1 Luminaire data

1.1 selux, Olivio Medio Medium wi... (SX 961 11-V + S...)

1.1.1 Data sheet

Manufacturer: selux

selux

SX 961 11-V + SX 97-591-0 EXTERIOR - Projector Olivio Medio Medium with Honeycomb

Luminaire head

rotationally symmetric, medium beam 40° (± 20°)

electronic converter

housing made of die-cast aluminium, aluminium, stainless steel, painted, screws stainless steel, easy maintenance access facilitated by lock-bar mechanism, the power cord is invisibly conducted through the 2-way adjustable head joint, light direction can be thoroughly adjusted by the 2-way adjustable head joint, can be swivelled from 20° to 195° and rotated +/- 180°

toughened glass

Optical system: medium reflector

colour: Selux graphite or choice of colours, Weight: 5,6 kg, IP67

Luminaire data

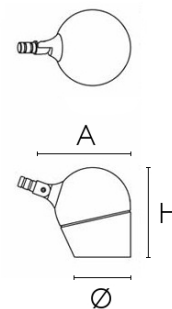
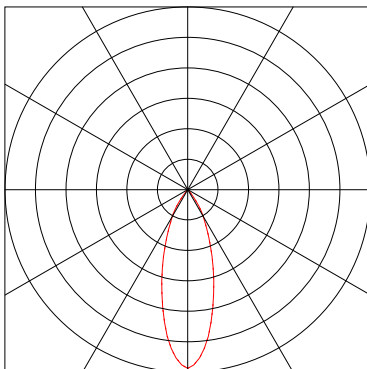
Absolute Photometry

Luminaire efficacy : 44.44 lm/W
Classification : A80 ↓ 100.0% ↑ 0.0%
CIE Flux Codes : 98 100 100 100 100
UGR 4H 8H : <10.0 / <10.0
Power : 9 W
Luminous flux : 400 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 3000K (CRI 80)

Dimensions : Ø163 mm x 260 mm



Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

selux

1 Luminaire data

1.2 selux, Olivio Medio (SX 961 12-V)

1.2.1 Data sheet

Manufacturer: selux

selux

SX 961 12-V EXTERIOR - Projector Olivio Medio

Luminaire head

rotationally symmetric, wide beam 80° (± 40°)

electronic converter

housing made of die-cast aluminium, aluminium, stainless steel, painted, screws stainless steel, easy maintenance access facilitated by lock-bar mechanism, the power cord is invisibly conducted through the 2-way adjustable head joint, light direction can be thoroughly adjusted by the 2-way adjustable head joint, can be swivelled from 20° to 195° and rotated +/- 180°

toughened glass

Optical system: flood reflector

colour: Selux graphite or choice of colours, Weight: 5,6 kg, IP67

Luminaire data

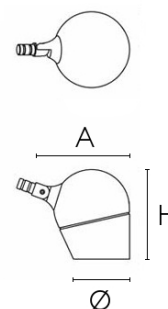
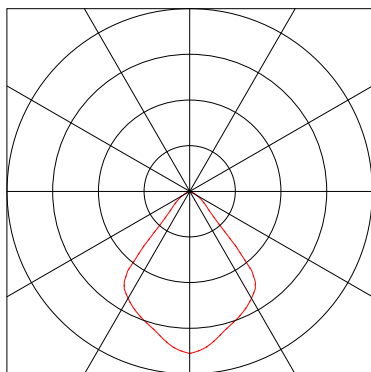
Absolute Photometry

Luminaire efficacy : 75 lm/W
Classification : A60 ↓ 100.0% ↑ 0.0%
CIE Flux Codes : 83 97 100 100 100
UGR 4H 8H : 16.6 / 16.6
Control gear : unknown
Power : 8 W
Luminous flux : 600 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 3000K (CRI 80)

Dimensions : Ø163 mm x 260 mm

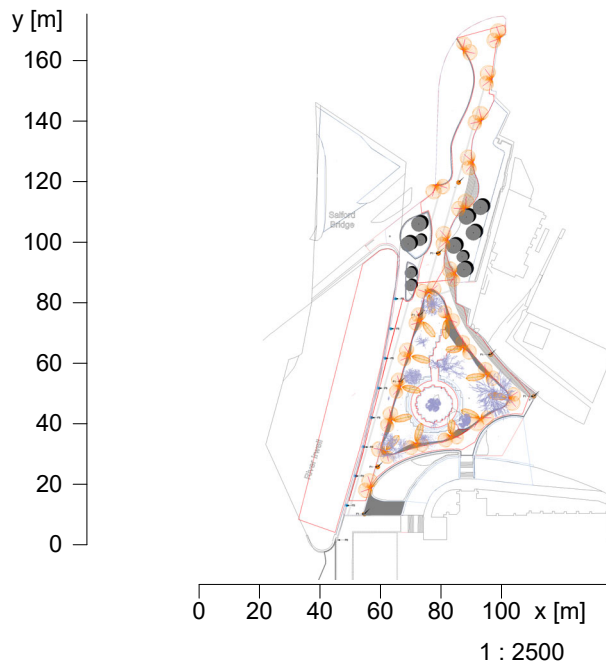


Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2 Exterior

2.1 Description, Exterior

2.1.1 Floor plan

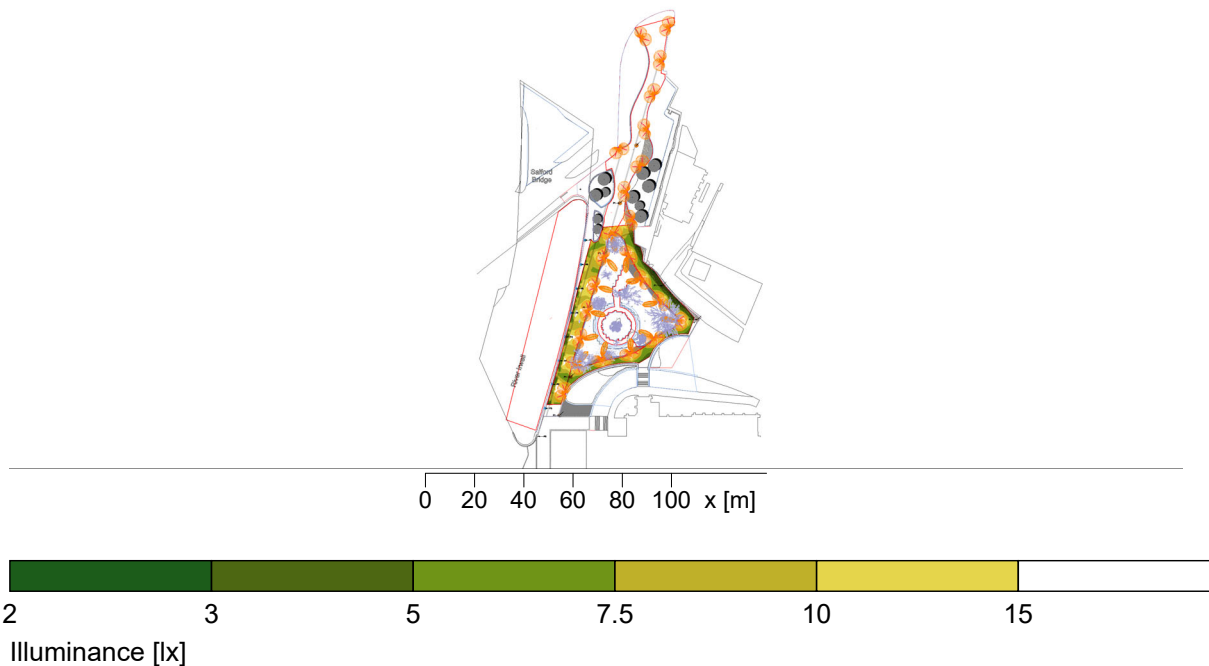


Object : The Glade of Light
 Installation : Exterior
 Project number : VE 606528
 Date : 01.04.2021

2 Exterior

2.2 Summary, Exterior

2.2.1 Result overview, Glade: Outer path



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	47200 lm
Total power	677 W
Total power per area (13771.09 m ²)	0.05 W/m ²

Illuminance

Average illuminance	Em	9.1 lx
Minimum illuminance	Emin	2.3 lx
Maximum illuminance	Emax	21.9 lx
Uniformity Uo	Emin/Em	1:3.95 (0.25)
Diversity Ud	Emin/Emax	1:9.49 (0.11)

Type No. \ Make

3	10	Order No.	:
		Luminaire name	: 6m pole 3 heads
		with	: 1 x SX 961 11-V + SX 97-591-0
		Equipment	: 1 x LED 9 W / 400 lm
		with	: 2 x SX 961 12-V
		Equipment	: 1 x LED 8 W / 600 lm

Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2 Exterior

2.2 Summary, Exterior

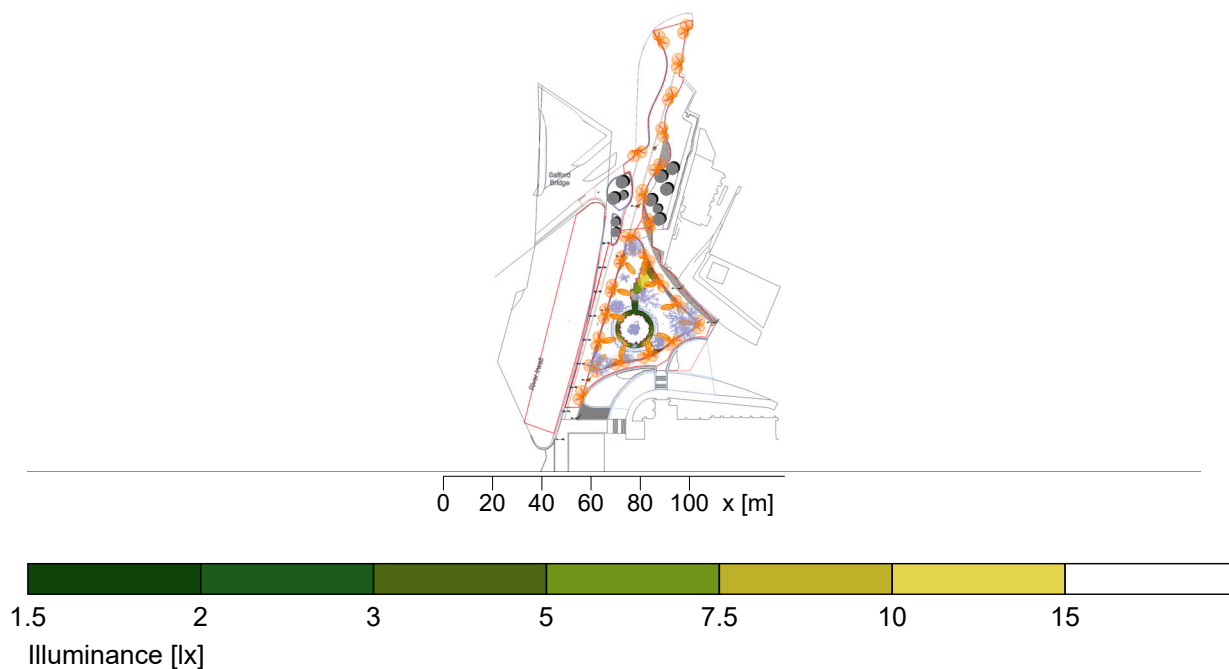
2.2.1 Result overview, Glade: Outer path

- 4 10 Order No. :
Luminaire name : 6m pole | 2 heads
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 5 3 Order No. :
Luminaire name : 6m pole | 3 heads
 with : 1 x SX 961 11-V + SX 97-591-0
 Equipment : 1 x LED 9 W / 400 lm
with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 6 8 **(c) selux Aktiengesellschaft**
Order No. :
 Luminaire name : Aira mod. opal
Equipment : 1 x LED 24 W / 1800 lm

Object : The Glade of Light
 Installation : Exterior
 Project number : VE 606528
 Date : 01.04.2021

2.2 Summary, Exterior

2.2.2 Result overview, Glade: Inner path



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	47200 lm
Total power	677 W
Total power per area (13771.09 m ²)	0.05 W/m ²

Illuminance

Average illuminance	Em	8.1 lx
Minimum illuminance	Emin	1.9 lx
Maximum illuminance	Emax	21.4 lx
Uniformity Uo	Emin/Em	1:4.19 (0.24)
Diversity Ud	Emin/Emax	1:11.1 (0.09)

Type No. \ Make

3	10	Order No.	:
		Luminaire name	: 6m pole 3 heads
		with	: 1 x SX 961 11-V + SX 97-591-0
		Equipment	: 1 x LED 9 W / 400 lm
		with	: 2 x SX 961 12-V
		Equipment	: 1 x LED 8 W / 600 lm

Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2.2 Summary, Exterior

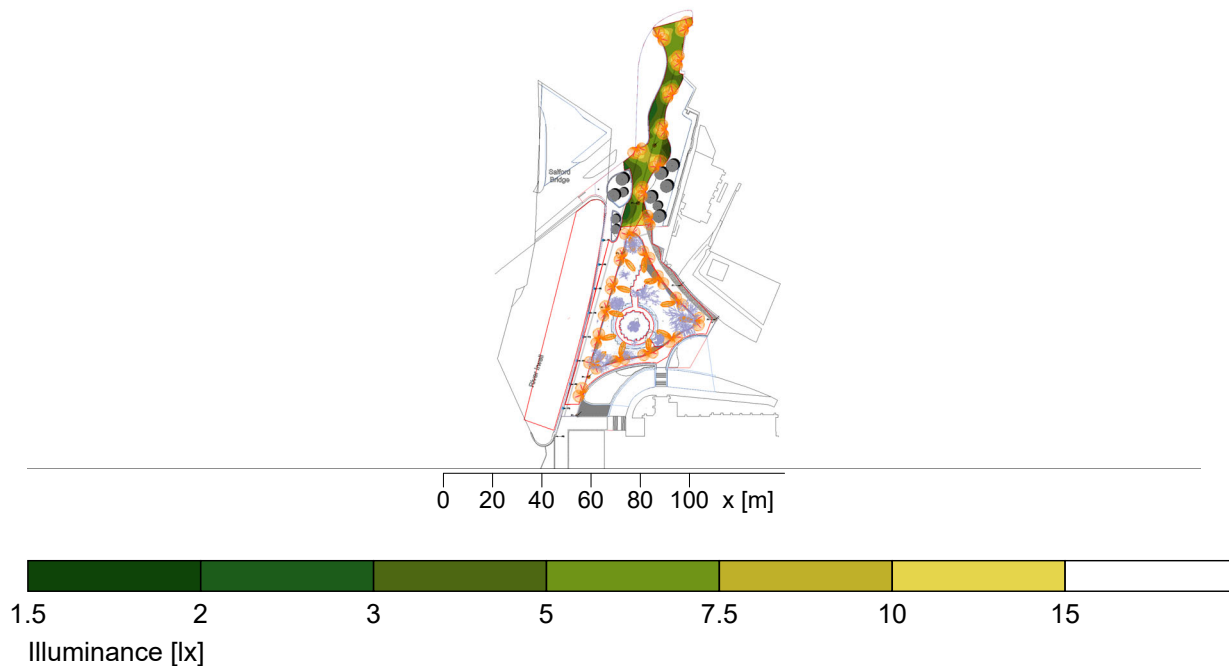
2.2.2 Result overview, Glade: Inner path

- 4 10 Order No. :
Luminaire name : 6m pole | 2 heads
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 5 3 Order No. :
Luminaire name : 6m pole | 3 heads
 with : 1 x SX 961 11-V + SX 97-591-0
 with : 2 x SX 961 12-V
Equipment : 1 x LED 9 W / 400 lm
Equipment : 1 x LED 8 W / 600 lm
- (c) selux Aktiengesellschaft**
6 8 Order No. :
 Luminaire name : Aira mod. opal
Equipment : 1 x LED 24 W / 1800 lm

Object : The Glade of Light
 Installation : Exterior
 Project number : VE 606528
 Date : 01.04.2021

2.2 Summary, Exterior

2.2.3 Result overview, Path to city centre



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	47200 lm
Total power	677 W
Total power per area (13771.09 m ²)	0.05 W/m ²

Illuminance

Average illuminance	Em	7.4 lx
Minimum illuminance	Emin	1.9 lx
Maximum illuminance	Emax	19.6 lx
Uniformity Uo	Emin/Em	1:3.96 (0.25)
Diversity Ud	Emin/Emax	1:10.4 (0.1)

Type No. \ Make

3	10	Order No.	:
		Luminaire name	: 6m pole 3 heads
		with	: 1 x SX 961 11-V + SX 97-591-0
		Equipment	: 1 x LED 9 W / 400 lm
		with	: 2 x SX 961 12-V
		Equipment	: 1 x LED 8 W / 600 lm

Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2.2 Summary, Exterior

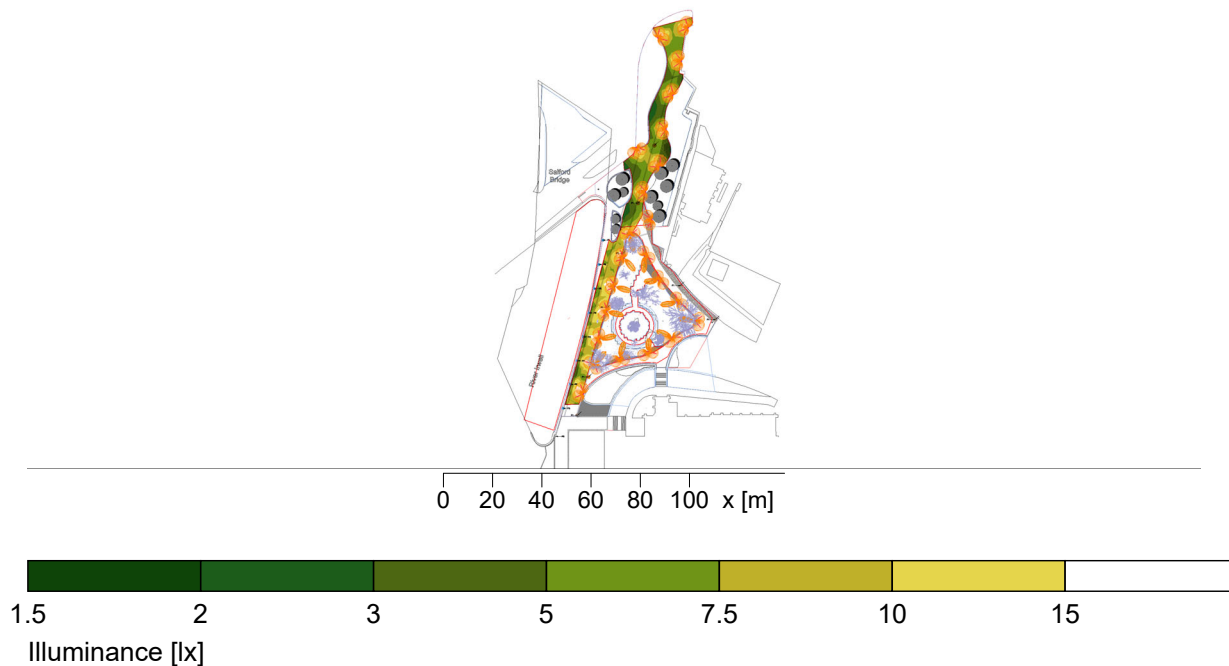
2.2.3 Result overview, Path to city centre

- 4 10 Order No. :
Luminaire name : 6m pole | 2 heads
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 5 3 Order No. :
Luminaire name : 6m pole | 3 heads
 with : 1 x SX 961 11-V + SX 97-591-0
 with : 2 x SX 961 12-V
Equipment : 1 x LED 9 W / 400 lm
Equipment : 1 x LED 8 W / 600 lm
- 6 8 **(c) selux Aktiengesellschaft**
Order No. :
 Luminaire name : Aira mod. opal
Equipment : 1 x LED 24 W / 1800 lm

Object : The Glade of Light
 Installation : Exterior
 Project number : VE 606528
 Date : 01.04.2021

2.2 Summary, Exterior

2.2.4 Result overview, Entire pathway



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.10 m
Maintenance factor	0.80
Total luminous flux of all lamps	47200 lm
Total power	677 W
Total power per area (13771.09 m ²)	0.05 W/m ²

Illuminance

Average illuminance	Em	8.4 lx
Minimum illuminance	Emin	1.9 lx
Maximum illuminance	Emax	21.8 lx
Uniformity Uo	Emin/Em	1:4.33 (0.23)
Diversity Ud	Emin/Emax	1:11.2 (0.09)

Type No. \ Make

3	10	Order No.	:
		Luminaire name	: 6m pole 3 heads
		with	: 1 x SX 961 11-V + SX 97-591-0
		Equipment	: 1 x LED 9 W / 400 lm
		with	: 2 x SX 961 12-V
		Equipment	: 1 x LED 8 W / 600 lm



Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2.2 Summary, Exterior

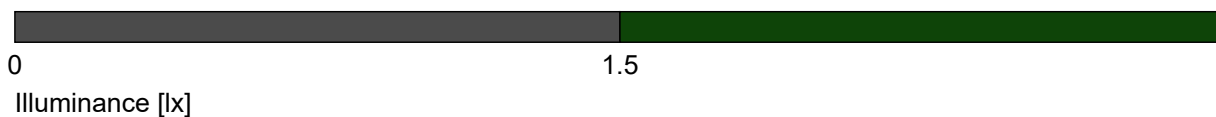
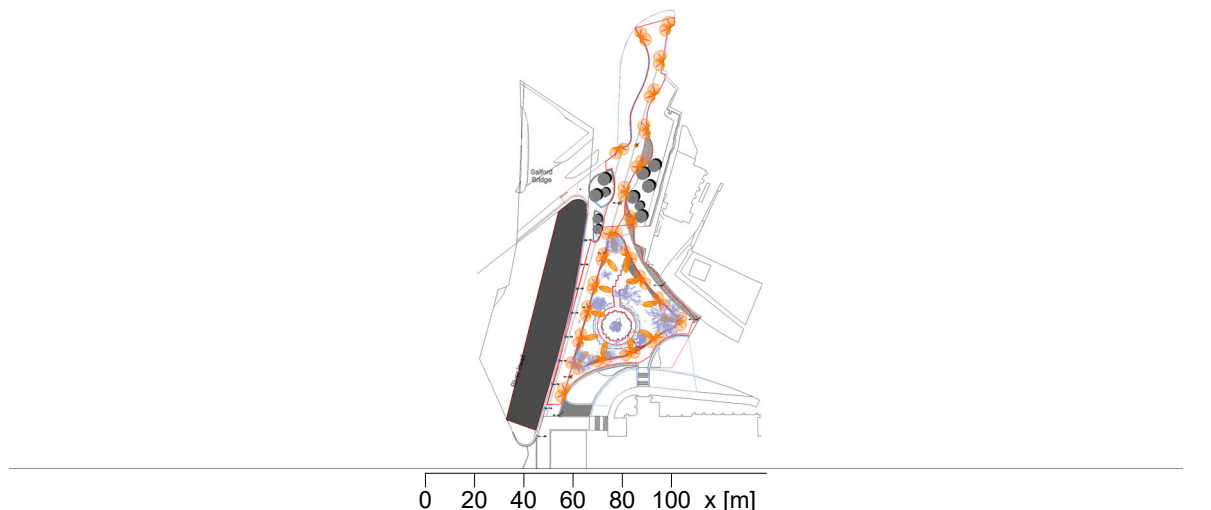
2.2.4 Result overview, Entire pathway

- 4 10 Order No. :
Luminaire name : 6m pole | 2 heads
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 5 3 Order No. :
Luminaire name : 6m pole | 3 heads
 with : 1 x SX 961 11-V + SX 97-591-0
 with : 2 x SX 961 12-V
Equipment : 1 x LED 9 W / 400 lm
Equipment : 1 x LED 8 W / 600 lm
- 6 8 **(c) selux Aktiengesellschaft**
 Order No. :
Luminaire name : Aira mod. opal
Equipment : 1 x LED 24 W / 1800 lm

Object : The Glade of Light
 Installation : Exterior
 Project number : VE 606528
 Date : 01.04.2021

2.2 Summary, Exterior

2.2.5 Result overview, River Irwell Spill Light Check



General

Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	47200 lm
Total power	677 W
Total power per area (13771.09 m²)	0.05 W/m²

Illuminance

Average illuminance	Em	0 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	0 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

Type No.\Make

3	10	Order No.	:
		Luminaire name	: 6m pole 3 heads
		with	: 1 x SX 961 11-V + SX 97-591-0
		Equipment	: 1 x LED 9 W / 400 lm
		with	: 2 x SX 961 12-V
		Equipment	: 1 x LED 8 W / 600 lm



Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

2.2 Summary, Exterior

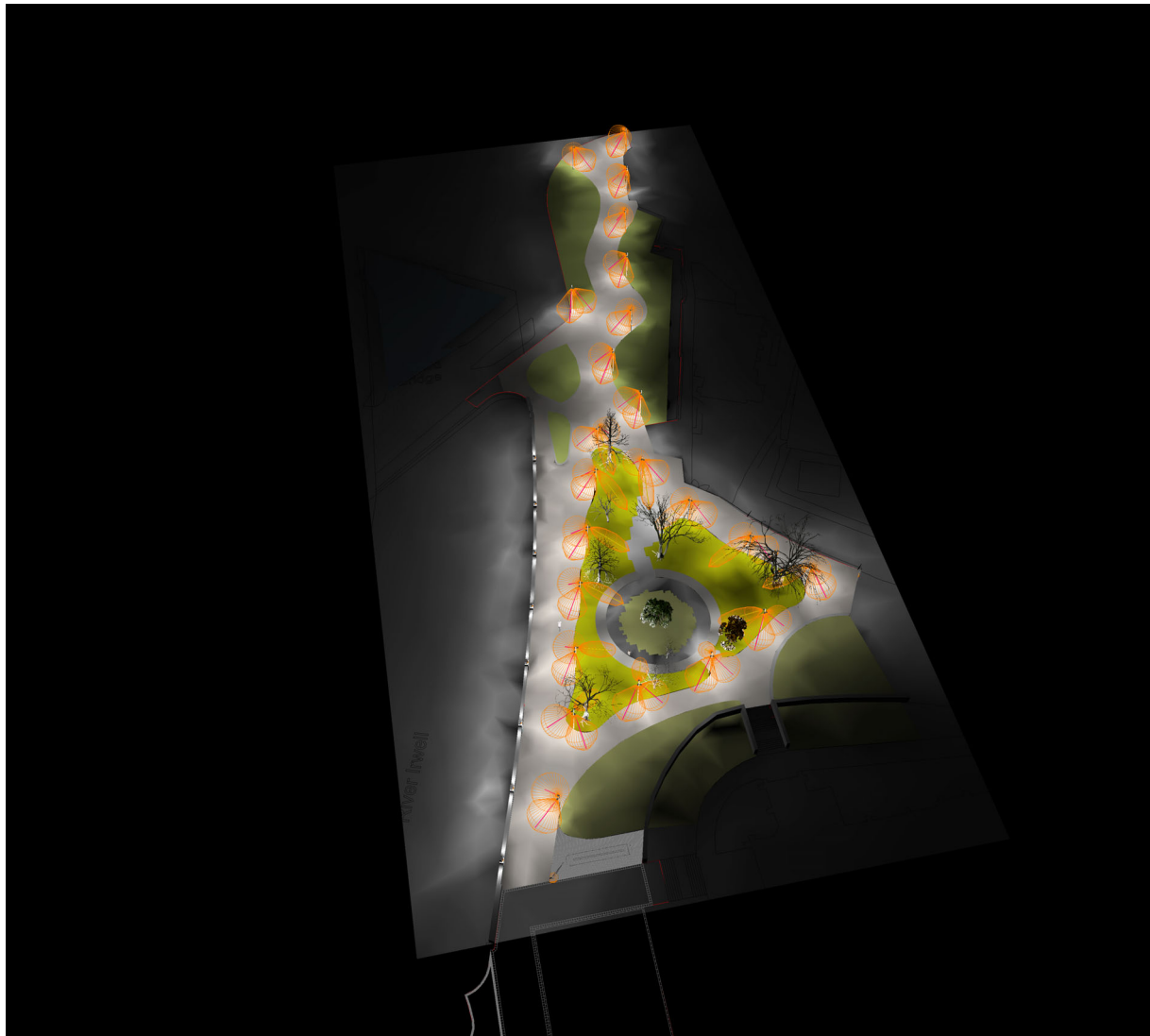
2.2.5 Result overview, River Irwell Spill Light Check

- 4 10 Order No. :
Luminaire name : 6m pole | 2 heads
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- 5 3 Order No. :
Luminaire name : 6m pole | 3 heads
 with : 1 x SX 961 11-V + SX 97-591-0
 with : 2 x SX 961 12-V
Equipment : 1 x LED 8 W / 600 lm
- (c) selux Aktiengesellschaft**
6 8 Order No. :
 Luminaire name : Aira mod. opal
Equipment : 1 x LED 24 W / 1800 lm

2 Exterior

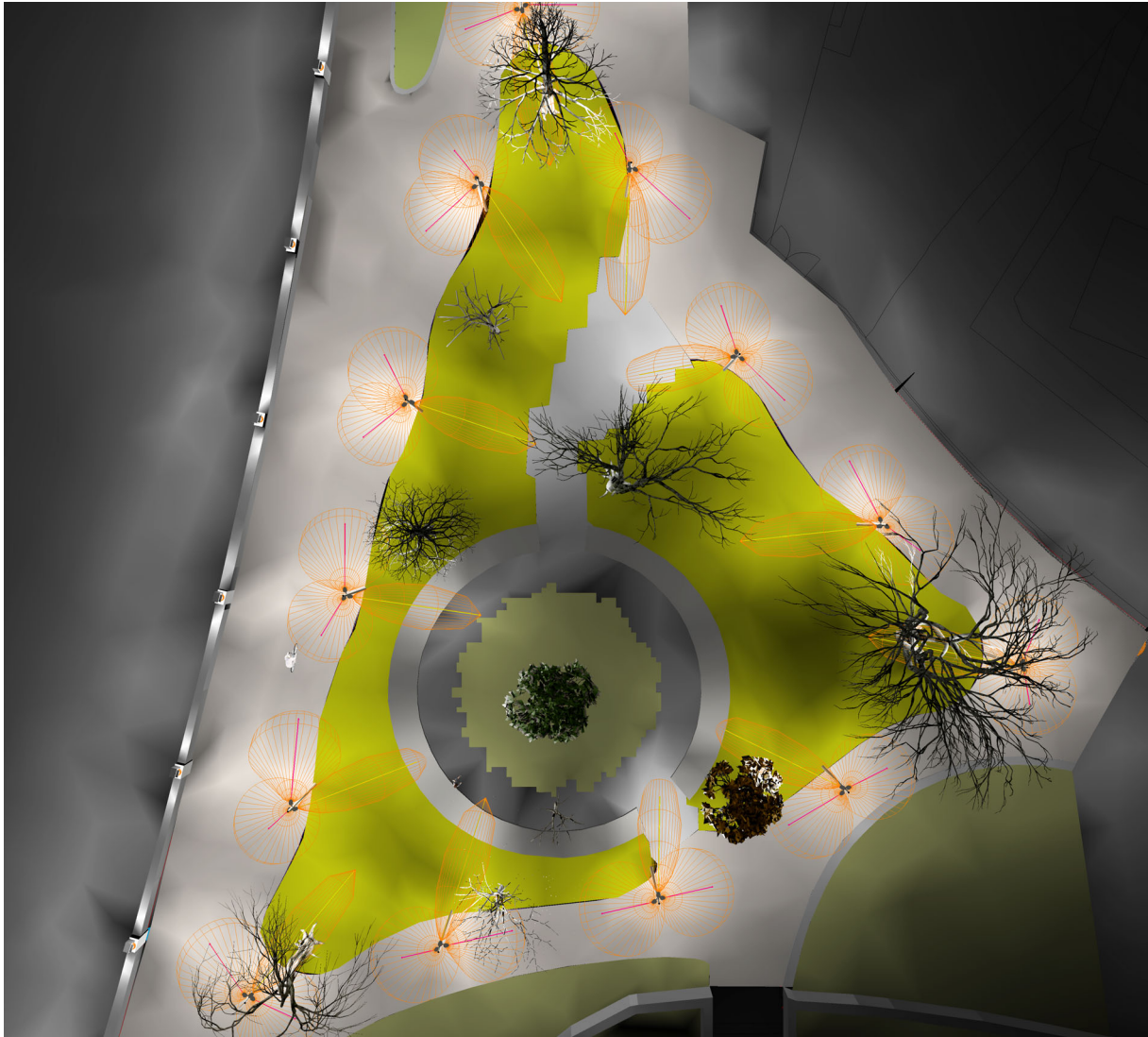
2.3 Calculation results, Exterior

2.3.1 3D luminance, 3D



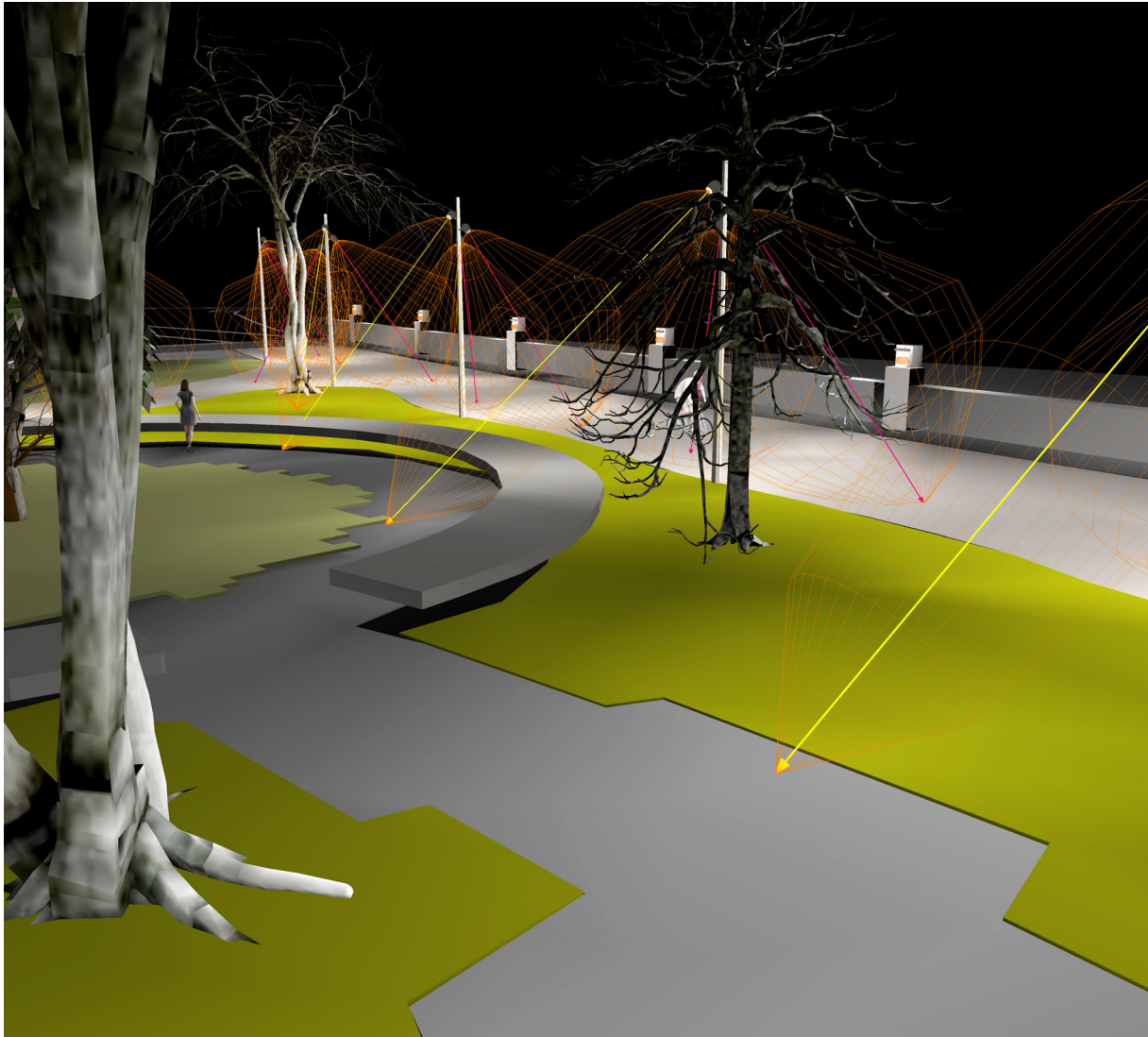
2.3 Calculation results, Exterior

2.3.2 3D luminance, Top-Side Glade



2.3 Calculation results, Exterior

2.3.3 3D luminance, Close-Up

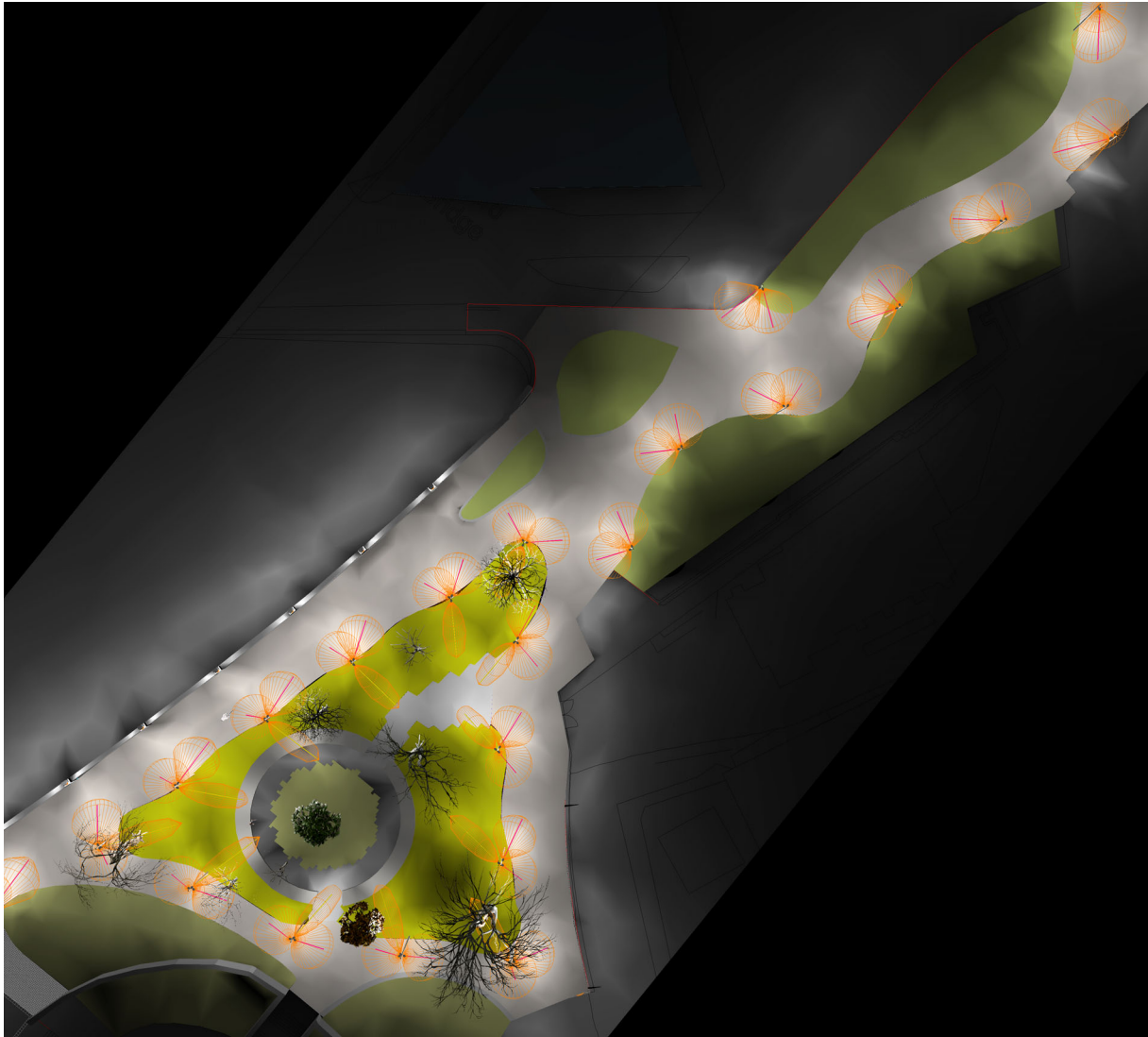


Object : The Glade of Light
Installation : Exterior
Project number : VE 606528
Date : 01.04.2021

selux

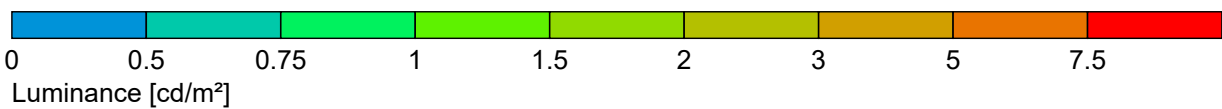
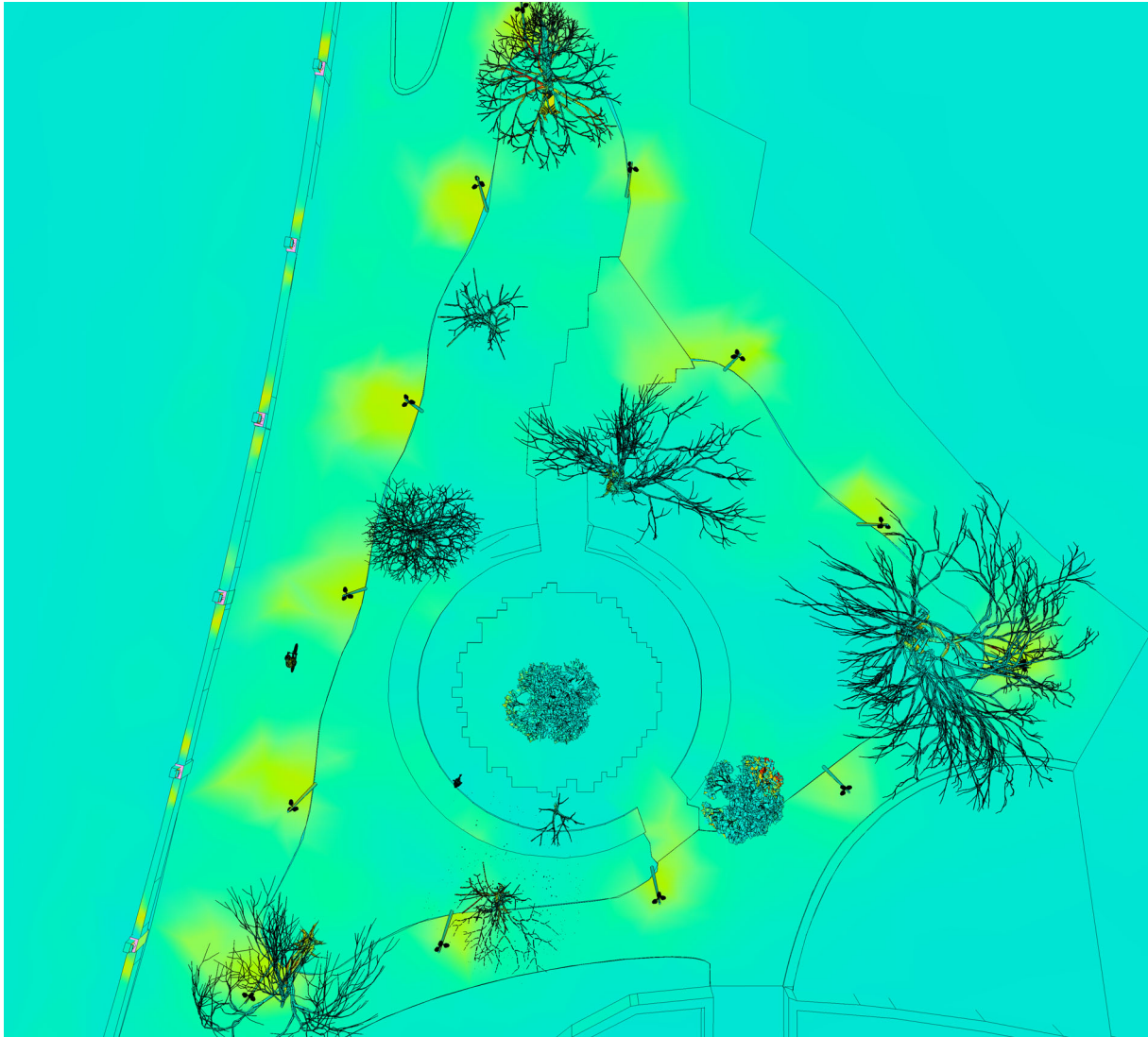
2.3 Calculation results, Exterior

2.3.4 3D luminance, Top-Side all-over



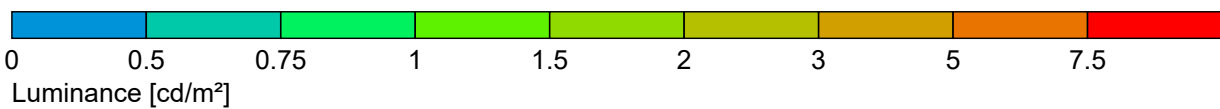
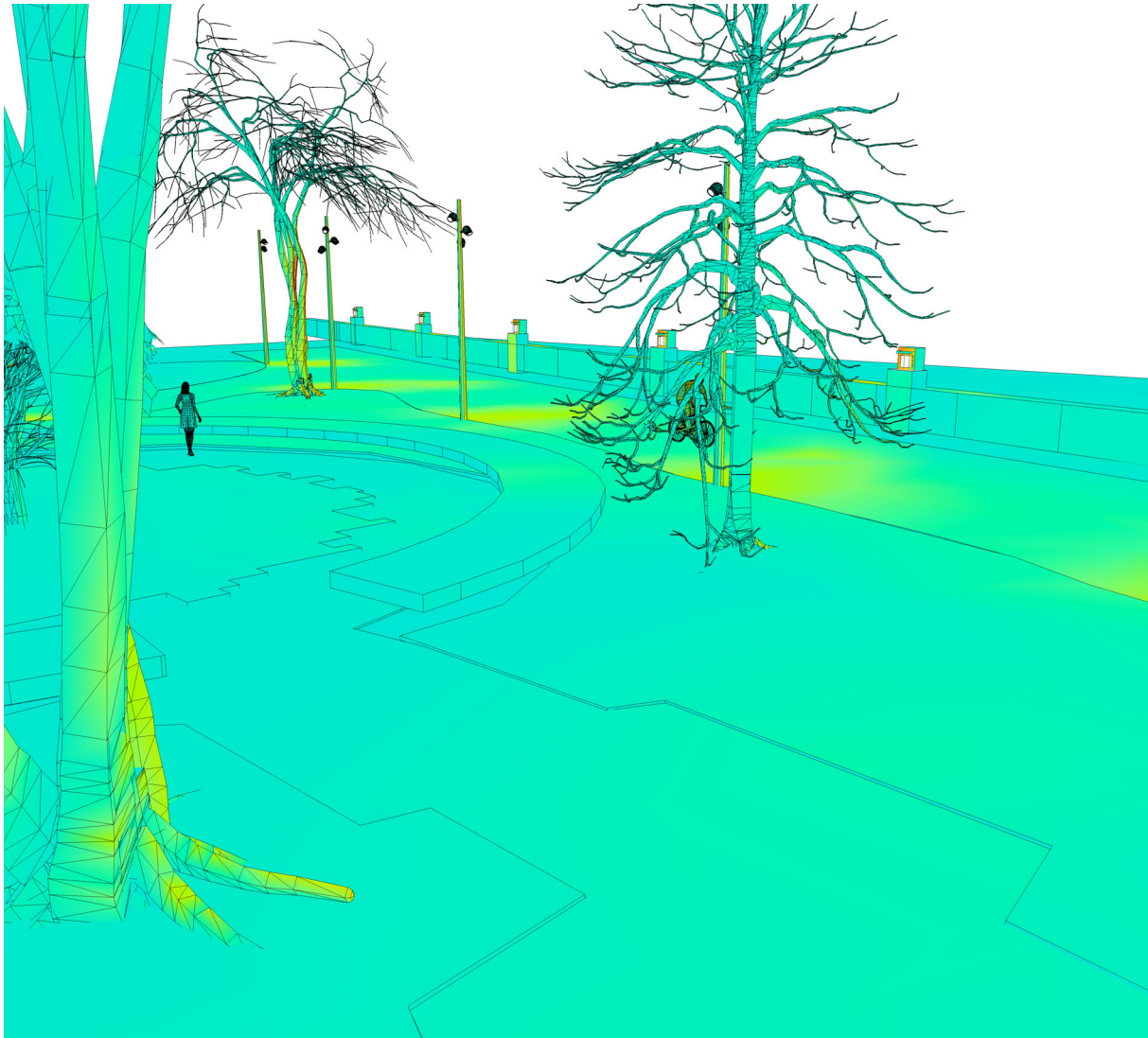
2.3 Calculation results, Exterior

2.3.5 3D pseudo colours, Top-Side Glade (L)



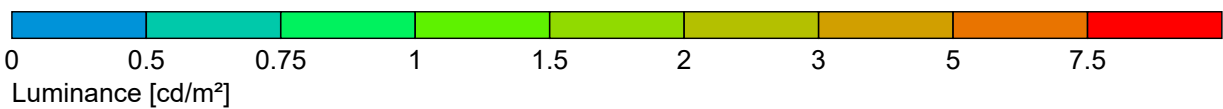
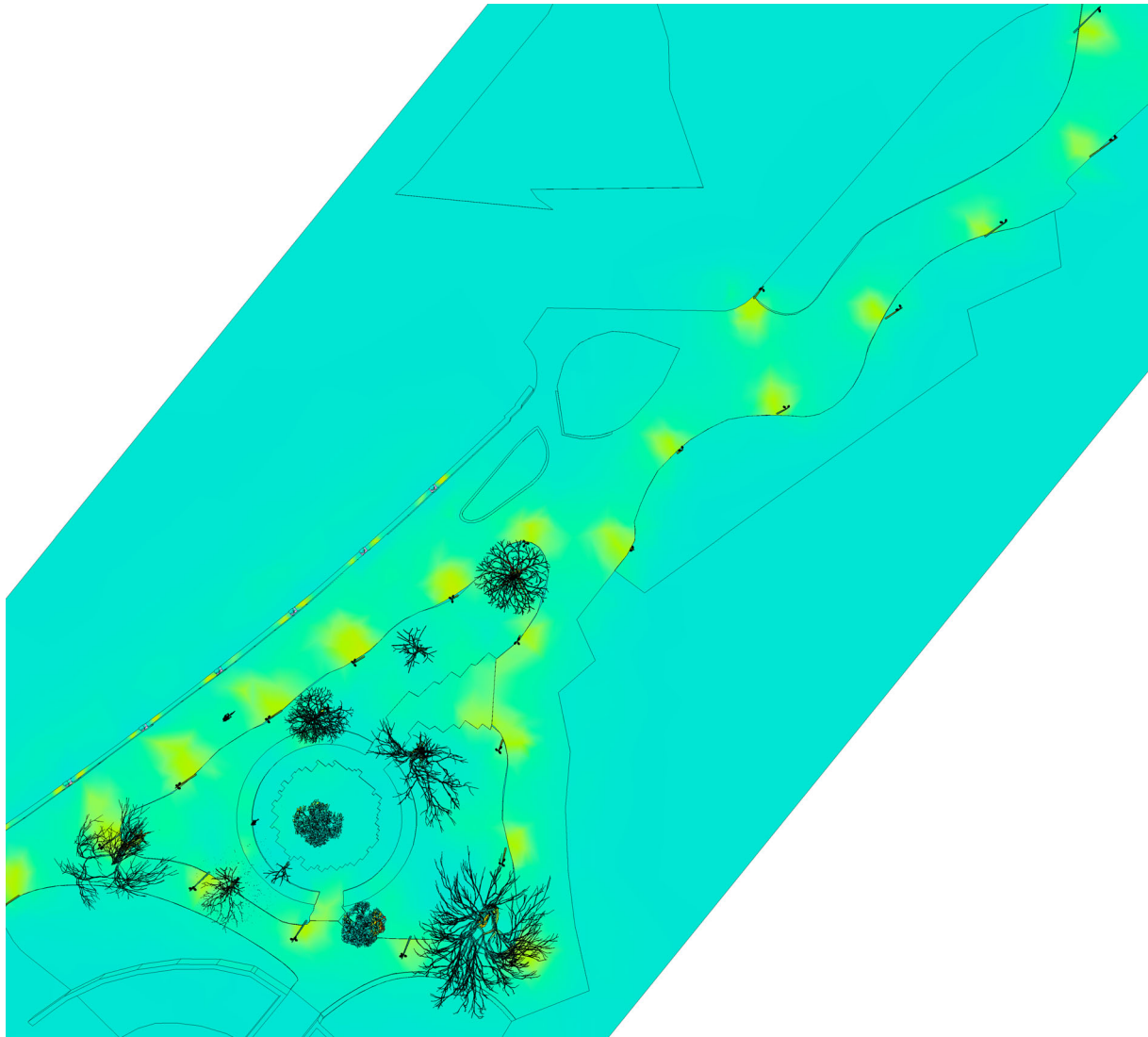
2.3 Calculation results, Exterior

2.3.6 3D pseudo colours, Close-Up (L)



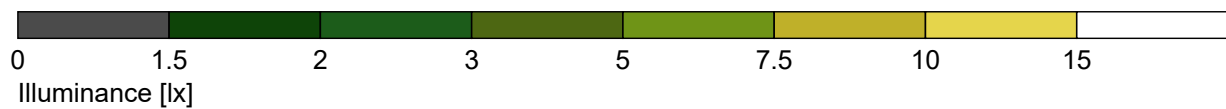
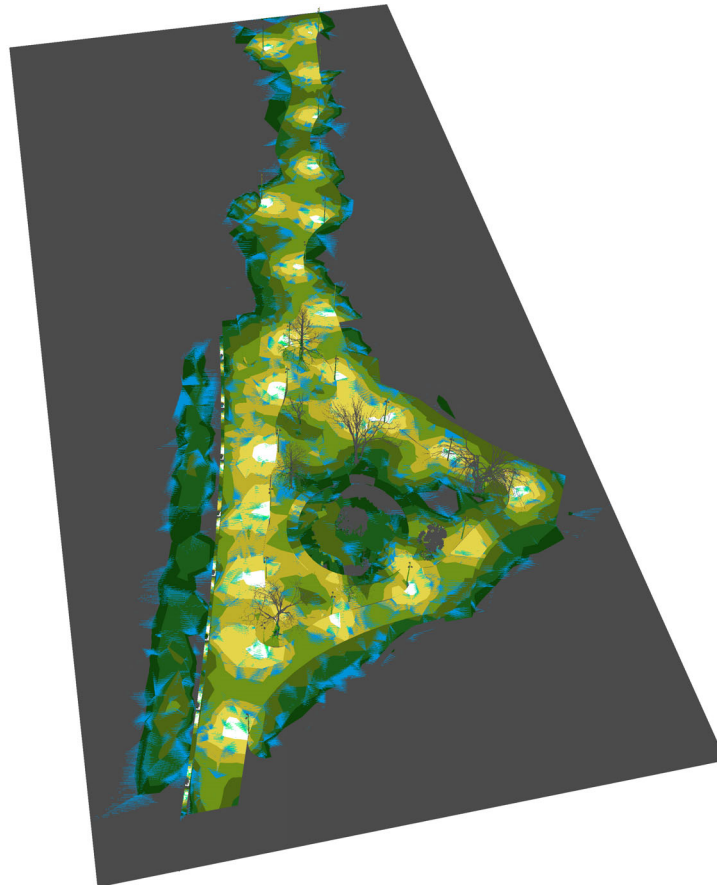
2.3 Calculation results, Exterior

2.3.7 3D pseudo colours, Top-Side all-over (L)



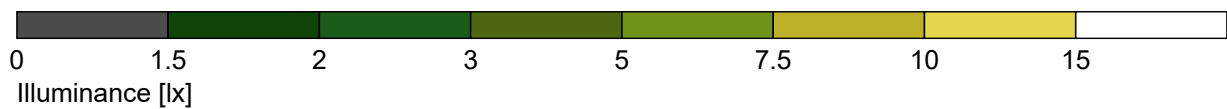
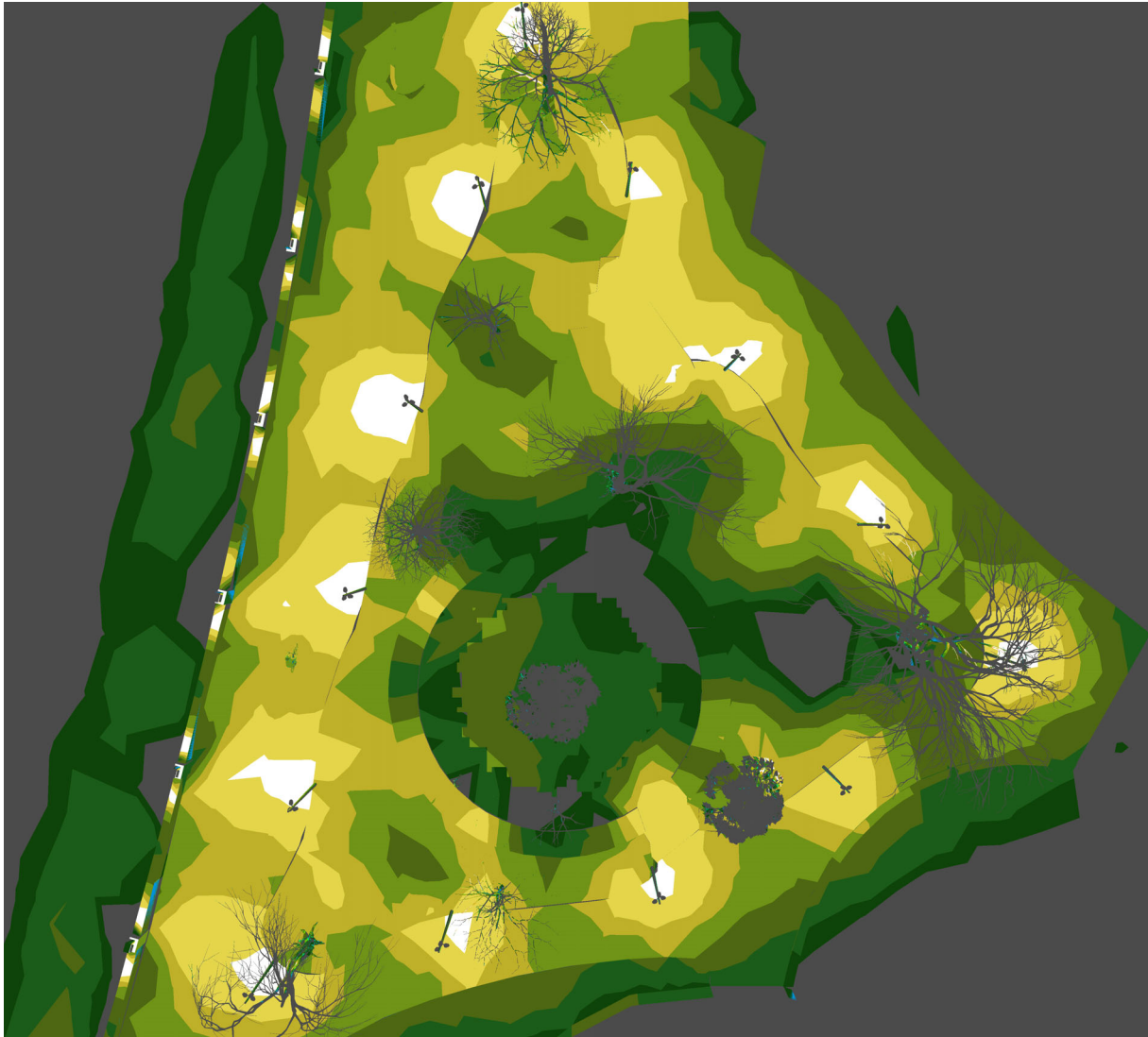
2.3 Calculation results, Exterior

2.3.8 3D pseudo colours, 3D (E)



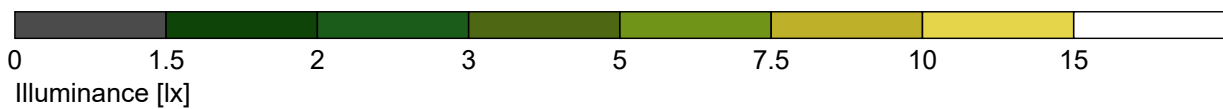
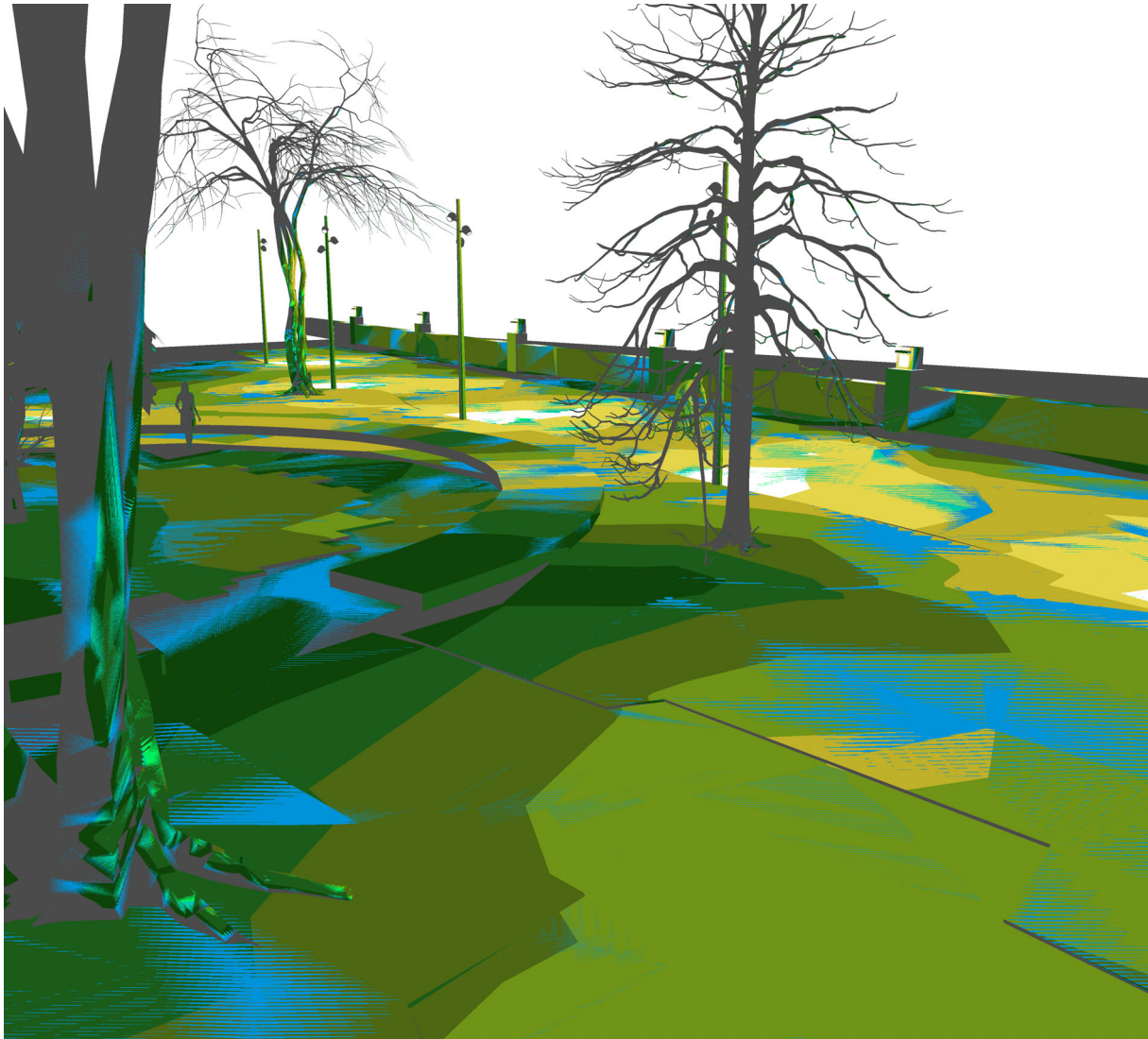
2.3 Calculation results, Exterior

2.3.9 3D pseudo colours, Top-Side Glade (E)



2.3 Calculation results, Exterior

2.3.10 3D pseudo colours, Close-Up (E)



2.3 Calculation results, Exterior

2.3.11 3D pseudo colours, Top-Side all-over (E)

