

## Installation : Proposed New Lighting

Project number :

Customer :

Processed by : Nicholas Gwilliam

Date : 07.02.2020

### Project description:

All room/exterior area dimensions to be checked on-site prior to installation.

Calculation based on standard reflectance values as 70/50/20 and Maintenance Factor 0.8.

Lighting designed to CIBSE guidelines where applicable and/or client requirements, all stated lux values are for overall averages across the room reference plane.

Emergency lighting design has been designed in accordance with BS5266/EN1838/ I.S. 3217 where applicable. The emergency lighting needs to be checked and approved by a local fire control officer. All emergency lighting calculations is completed based on 0.5lux for Open Areas and 1lux for Escape Route.

This emergency lighting does not include the calculation for the location of critical emergency items such as (Plant or Switch rooms location of task, Reception telephone, First Aid Points, Extinguisher points, Call points, push bars, fire panels, etc.) as there are not present on issued drawings, therefore higher require lux levels under emergency conditions cannot be design at this stage.

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 :  
Installation : Proposed New Lighting  
Project number :  
Date : 07.02.2020



## 1 Luminaire data

### 1.1 ANSELL, FLOODLIGHTING - Onix LED Stre... (AONIXLED/1)

#### 1.1.1 Data sheet

Manufacturer: ANSELL



**AONIXLED/1 Street luminaire FLOODLIGHTING - Onix LED Street Light**

AONIXLED/1  
FLOODLIGHTING  
Onix LED Street Light  
LED 20W - Cool White

Supplied c/w Integral Driver

- Die-cast aluminium construction for optimal heat dissipation for optimal performance
- UV stabilized polycarbonate cover
- Toolless gear tray removal for ease of maintenance
- Built in anti-tamper isolation facility
- Compatible with post top or side entry utility 76mm spigot
- IK10 Rated
- G3 Glare Rating
- Surge protection
- Available in standard, complete with photocell option
- LED lifespan L70 50,000 hours

Options  
/PC Electronic Photocell

Accessories  
AONIXLED/SBA 48-60mm Spigot Bracket

Operating Temp -40°C to 50°C

- 5 Year Product Warranty
- IP66

#### Luminaire data

Absolute Photometry  
Luminaire efficacy : 103.89 lm/W  
Classification : A30 ↓100.0% ↑0.0%  
CIE Flux Codes : 37 77 99 100 100  
UGR 4H 8H : 31.9 / 20.3  
Control gear : Electronic ballast  
Power : 19 W  
Luminous flux : 1974 lm  
  
Dimensions : 400 mm x 220 mm x 95 mm

#### Equipped with

Quantity : 1  
Designation :  
Colour :

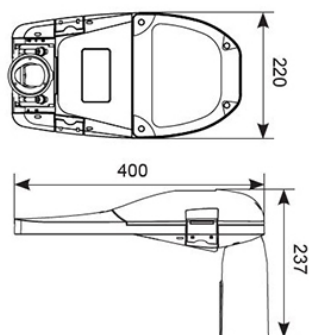
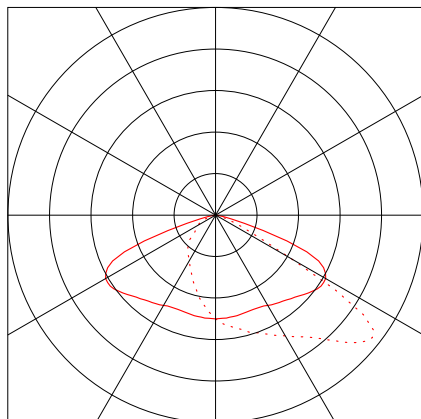
Object :  
Installation : Proposed New Lighting  
Project number :  
Date : 07.02.2020



## 1 Luminaire data

### 1.1 ANSELL, FLOODLIGHTING - Onix LED Stre... (AONIXLED/1)

#### 1.1.1 Data sheet



AONIXLED/1 - AONIXLED/2

Object :  
Installation : Proposed New Lighting  
Project number :  
Date : 07.02.2020



## 1 Luminaire data

### 1.2 ANSELL, FLOODLIGHTING - Mira 2 LE... (AM2LED/ASY/500)

#### 1.2.1 Data sheet

Manufacturer: ANSELL



**AM2LED/ASY/500 Rectangular projector FLOODLIGHTING - Mira 2 LED Asymmetric Floodlight**

AM2LED/ASY/500

FLOODLIGHTING

Mira 2 LED Asymmetric Floodlight

LED 500W - Daylight

Supplied c/w Integral Driver

- Die-cast LED floodlight with textured graphite colour finish
- Asymmetric reflector for anti-light pollution
- Exceeds the performance of 1000W HQI
- Lighting for large open spaces, sports centers and industrial spaces
- LED lifespan L70 50,000 hours
- Non-dimmable

Options

/PC Electronic Photocell

Operating Temp -20°C to 50°C

- Suitable for external use only
- 5 Year Product Warranty
- IP65

#### Luminaire data

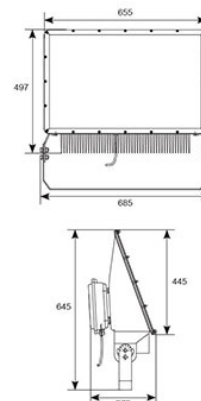
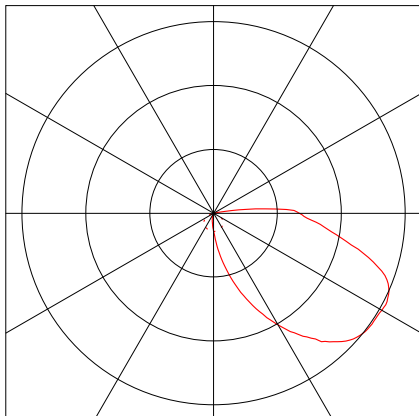
Absolute Photometry

Luminaire efficacy	: 145.72 lm/W
Classification	: A11 ↓96.3% ↑3.7%
CIE Flux Codes	: 21 53 82 96 100
UGR 4H 8H	: 40.5 / 28.9
Control gear	: Electronic ballast
Power	: 500 W
Luminous flux	: 72862 lm

Dimensions : 400 mm x 655 mm x 272 mm

#### Equipped with

Quantity	: 1
Designation	:
Colour	:



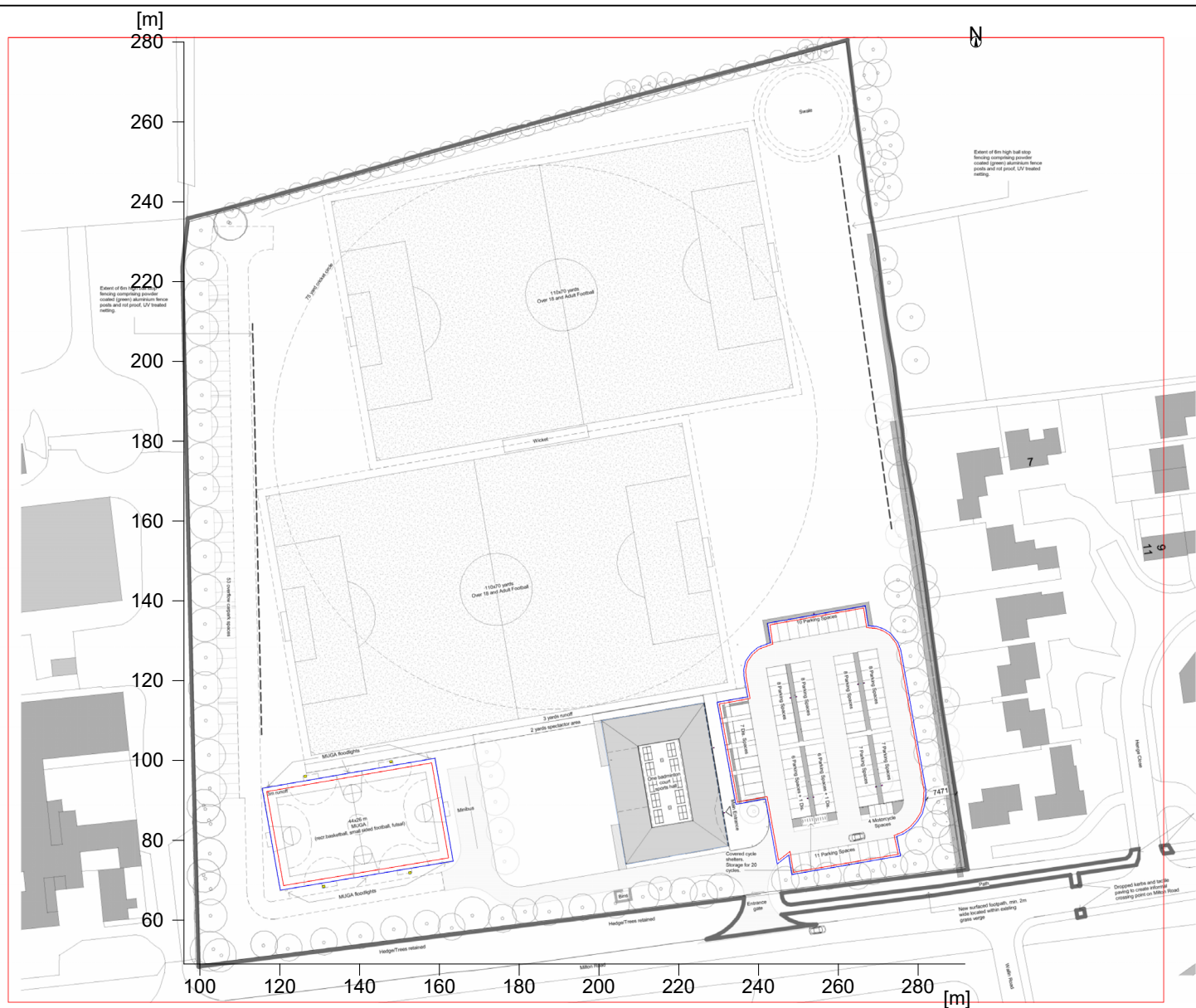
Object :  
 Installation : Proposed New Lighting  
 Project number :  
 Date : 07.02.2020



## 2 Exterior 1

### 2.1 Description, Exterior 1

#### 2.1.1 Floor plan



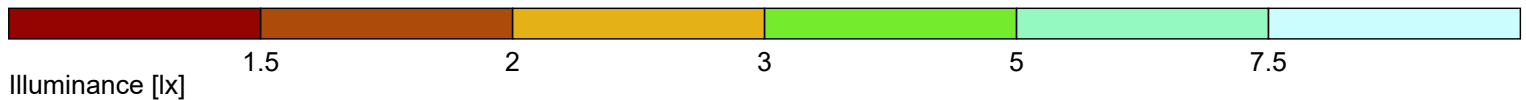
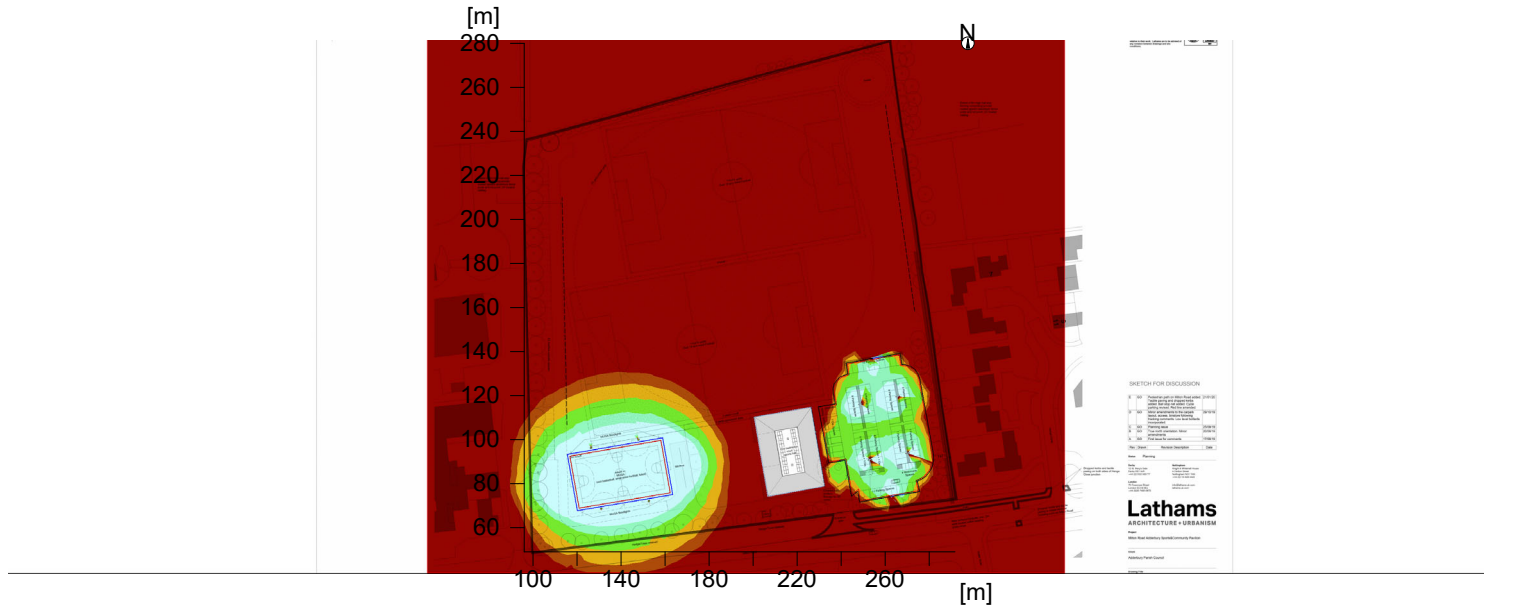
Object :  
 Installation : Proposed New Lighting  
 Project number :  
 Date : 07.02.2020



## 2 Exterior 1

### 2.2 Summary, Exterior 1

#### 2.2.1 Result overview, Measuring area 1



#### General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Maintenance factor	0.80

Total luminous flux of all lamps	315136 lm
Total power	2228 W
Total power per area (35670.93 m <sup>2</sup> )	0.06 W/m <sup>2</sup>

#### Illuminance

Average illuminance	Em	3 lx
Minimum illuminance	Emin	0 lx
Maximum illuminance	Emax	248 lx
Uniformity Uo	Emin/Em	1:--- (---)
Diversity Ud	Emin/Emax	1:--- (---)

#### Type No. Make

##### ANSELL

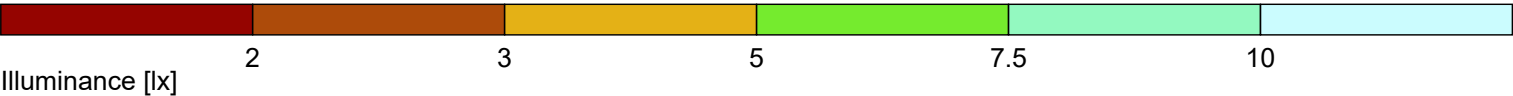
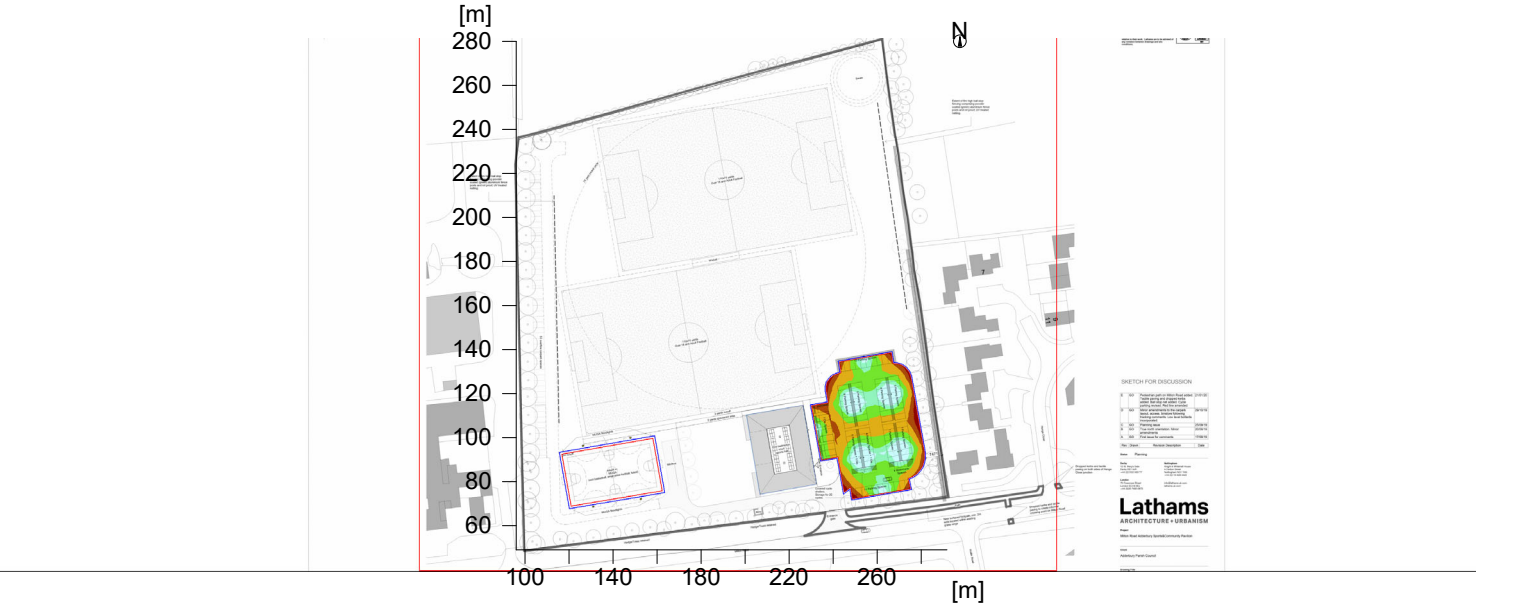
1	12	Order No.	: AONIXLED/1
		Luminaire name	: FLOODLIGHTING - Onix LED Street Light
		Equipment	: 1 x 19 W / 1974 lm

2	4	Order No.	: AM2LED/ASY/500
		Luminaire name	: FLOODLIGHTING - Mira 2 LED Asymmetric Floodlight
		Equipment	: 1 x 500 W / 72862 lm



2.2 Summary, Exterior 1

2.2.2 Result overview, Car Park



General	
Calculation algorithm used	Average indirect fraction
Maintenance factor	0.80
Total luminous flux of all lamps	17766.00 lm
Total power	171.0 W
Total power per area (2530.97 m²)	0.07 W/m² (1.12 W/m²/100lx)

Car Park	Reference plane 2.1
	Horizontal
	Em
	6.05 lx
	Emin
	1.69 lx
	Emin/Em (Uo)
	0.28
	Emin/Emax (Ud)
	0.11
	Position
	0.00 m

Type No.\Make

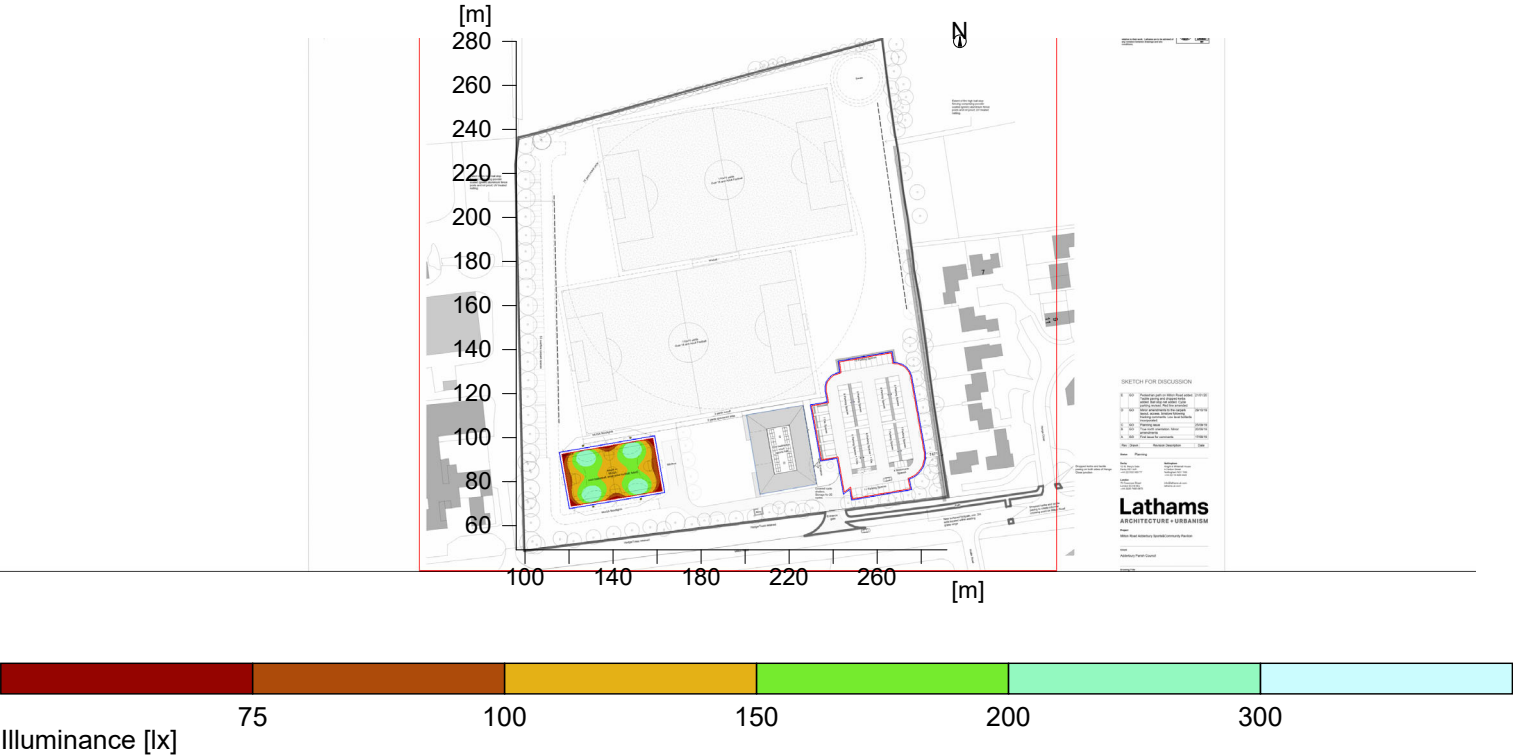
19	ANSELL	
	Order No.	: AONIXLED/1
	Luminaire name	: FLOODLIGHTING - Onix LED Street Light
	Equipment	: 1 x 19 W / 1974 lm





2.2 Summary, Exterior 1

2.2.3 Result overview, Muga



General

Calculation algorithm used

Maintenance factor

Average indirect fraction

0.80

Muga	Reference plane 3.1
	Horizontal
Em	149 lx
Emin	61 lx
Emin/Em (Uo)	0.41
Emin/Emax (Ud)	0.23
Position	0.00 m

Type No.Make



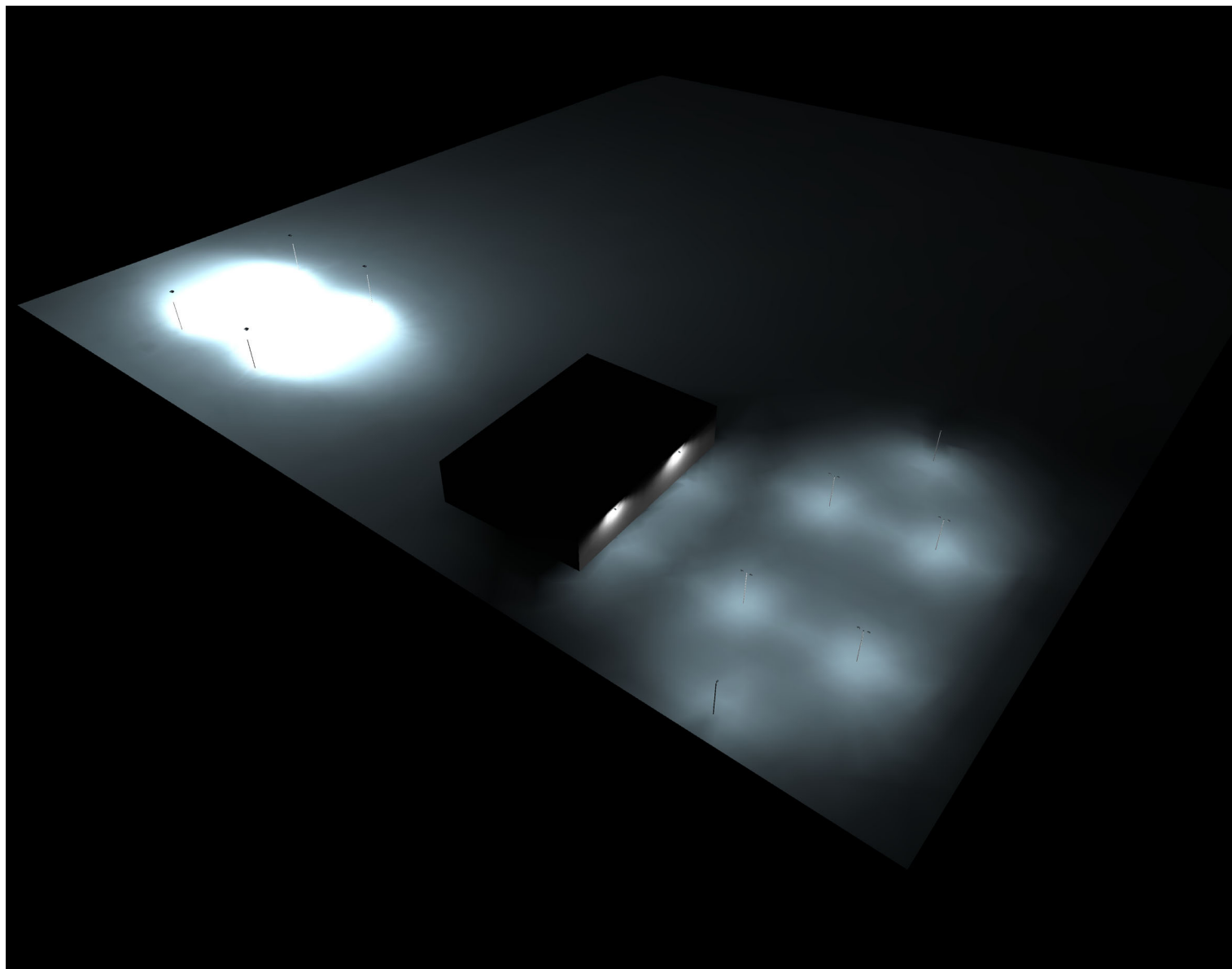
Object :  
Installation : Proposed New Lighting  
Project number :  
Date : 07.02.2020



## 2 Exterior 1

### 2.3 Calculation results, Exterior 1

#### 2.3.2 3D luminance, View 1



Luminance in the scene

Minimum: : 0 cd/m<sup>2</sup>

Maximum: : 203 cd/m<sup>2</sup>