



**IL SINDACO**

**IL SEGRETARIO**

**LA PROPRIETA'**

**IL TECNICO**

**PROPRIETA' :** Immobiliare Roma s.r.l.

**DENOMINAZIONE:** Progetto Illuminazione Pubblica redatto da Scheder S.P.A

**ALLEGATO**

**I**

**data :** Luglio 2016 **agg. :**

**scala :**

**Ulysse 3**



# Lottizzazione, Villasanta

(CIE 140)

Progettista : aquattroccolo  
Progetto # : 196Q16R

Studio # : Traversa interna  
Data : 04/05/2016

Schröder S.p.A.  
Via Val della Torre 131  
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[www.schreder.com](http://www.schreder.com)

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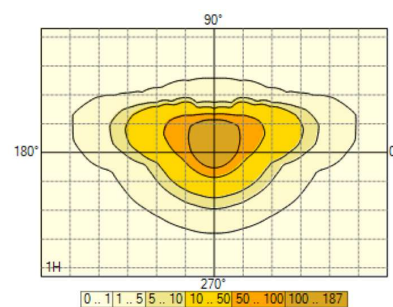
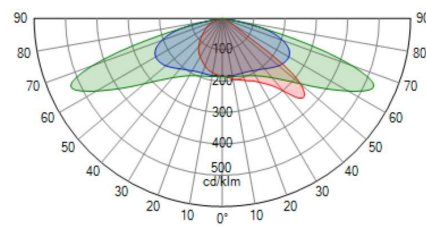
## 1. Apparecchi

### 1.1. AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572



|              |                                 |
|--------------|---------------------------------|
| Tipologia    | AMPERA MIDI                     |
| Riflettore   | 5139                            |
| Sorgente     | 32 LEDs 500mA NW                |
| Protettore   | Flat, Glass Extra Clear, Smooth |
| Impostazioni |                                 |
| Flusso di    | 6,9 klm                         |
| Classe - G   | 4                               |

|                    |           |
|--------------------|-----------|
| Potenza            | 51,0 W    |
| Potenza            | 51,0 W    |
| Efficienza         | 116 lm/W  |
| Flusso apparecchio | 5,902 klm |
| FM                 | 0,80      |
| Matrice            | 351572    |

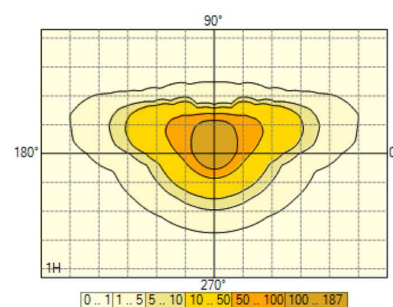
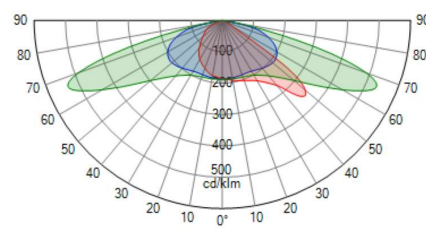


### 1.2. AMPERA MINI 16 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 356702



|              |                                 |
|--------------|---------------------------------|
| Tipologia    | AMPERA MINI                     |
| Riflettore   | 5139                            |
| Sorgente     | 16 LEDs 500mA NW                |
| Protettore   | Flat, Glass Extra Clear, Smooth |
| Impostazioni |                                 |
| Flusso di    | 3,5 klm                         |
| Classe - G   | 2                               |

|                    |           |
|--------------------|-----------|
| Potenza            | 26,0 W    |
| Potenza            | 26,0 W    |
| Efficienza         | 112 lm/W  |
| Flusso apparecchio | 2,908 klm |
| FM                 | 0,80      |
| Matrice            | 356702    |

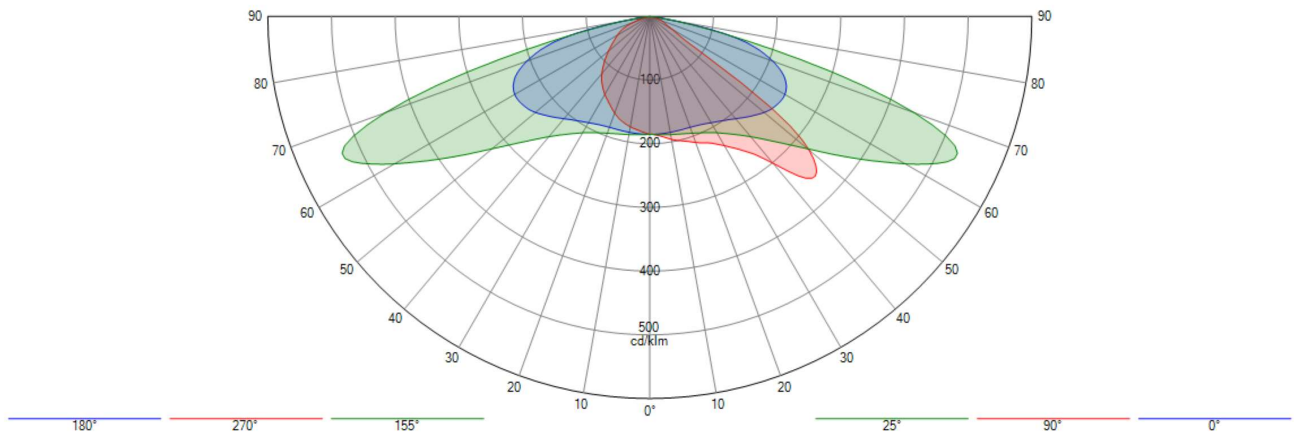


## 2. Documentazione Fotometrica

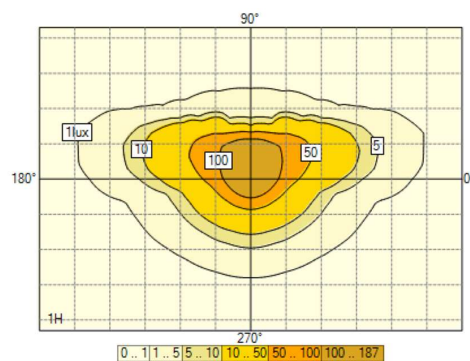
### 2.1. AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572

351572

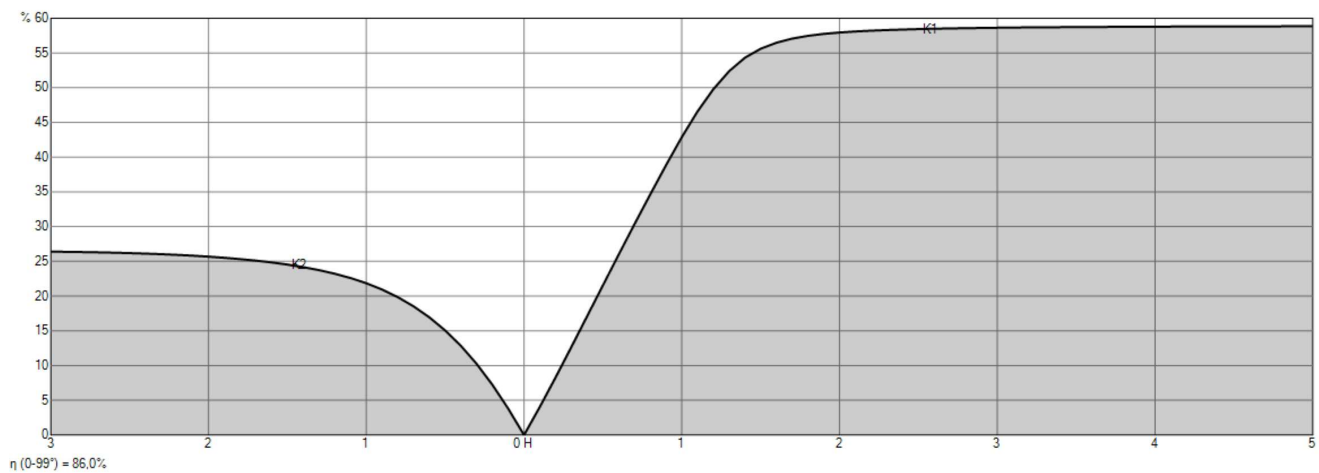
Diagramma Polare/Cartesiano



Isolux



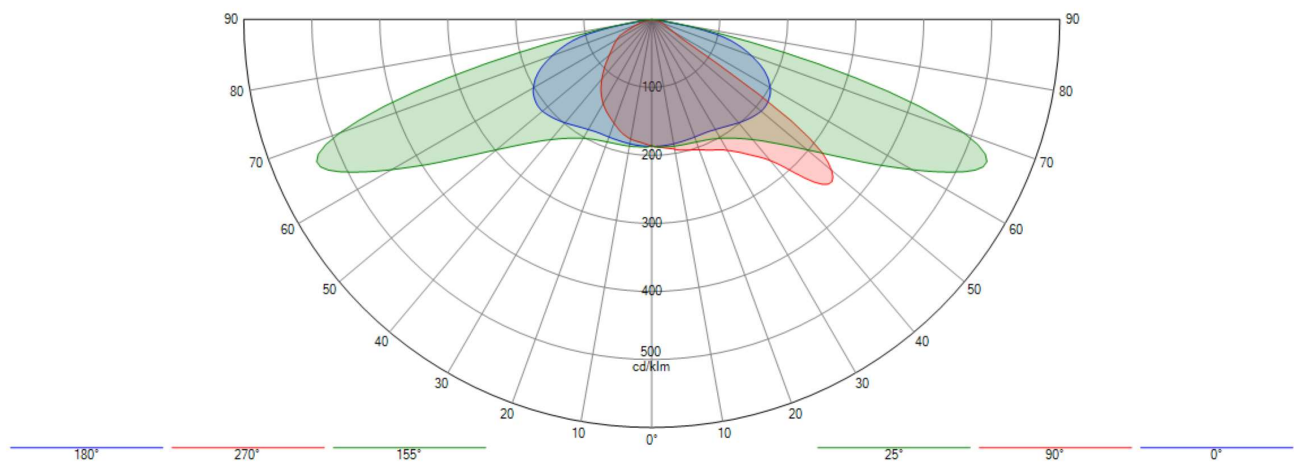
Rappresentazione del coef. di utilizzazione



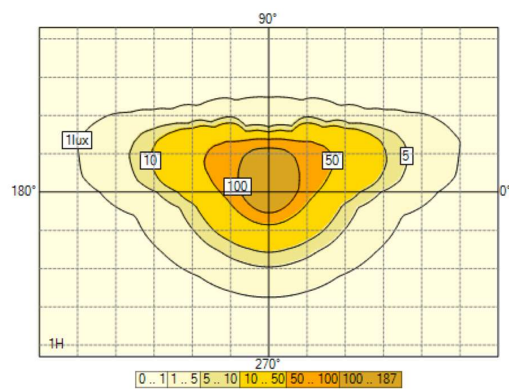
## 2.2. AMPERA MINI 16 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 356702

356702

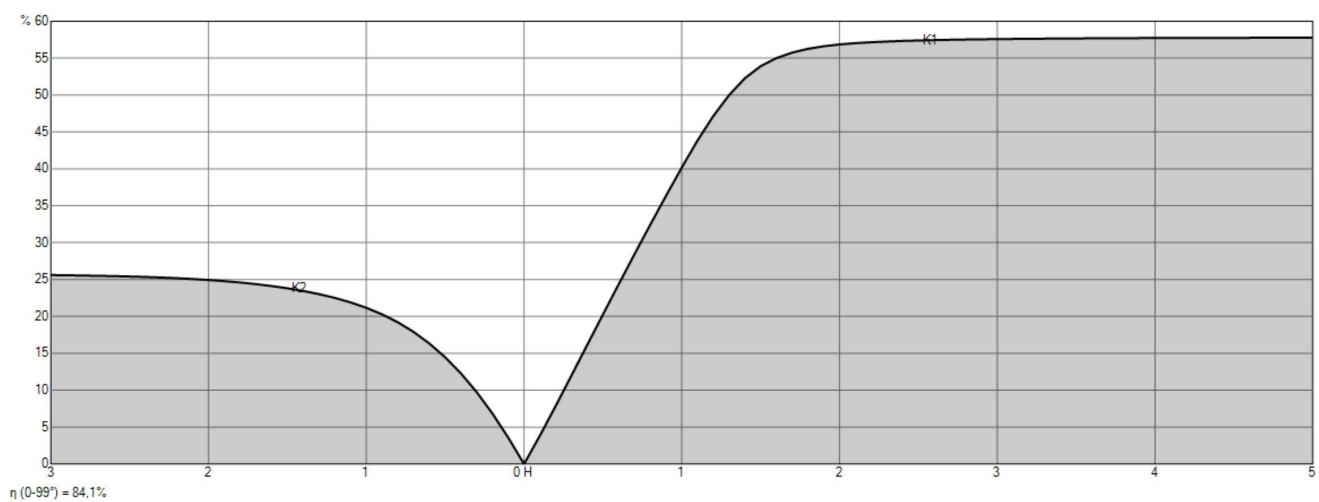
Diagramma Polare/Cartesiano



Isolux



Rappresentazione del coef. di utilizzazione



### 3. Risultati

#### 3.1. Riepilogo Griglia

- Parcheggio (IL)

S2 (1) (IL : Min = 3,00 lux Ave = 10,00 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 11,4              | 40             | 21             | 4,5          | 21,1         |



- Carreggiata (LU)

ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

##### 1. Luminanza - C2007

|                                                             | Medio<br>(M)<br>(cd/m <sup>2</sup> ) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(cd/m <sup>2</sup> ) | Max<br>(cd/m <sup>2</sup> ) | UL (%) |
|-------------------------------------------------------------|--------------------------------------|----------------|----------------|-----------------------------|-----------------------------|--------|
| Dynamic cross section - Osservatore 1 (-60,00; -9,50; 1,50) | 0,80                                 | 79             | 70             | 0,63                        | 0,91                        | 73 %   |
| Dynamic cross section - Osservatore 2 (-60,00; -6,50; 1,50) | 0,80                                 | 72             | 62             | 0,58                        | 0,94                        | 75 %   |



- Parcheggio (IL) (1)

S1 (1) (IL : Min = 5,00 lux Ave = 15,00 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 16,6              | 61             | 28             | 10,0         | 35,7         |



- Percorso pedonale (IL)

S2 (1) (IL : Min = 3,00 lux Ave = 10,00 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 12,4              | 66             | 42             | 8,2          | 19,4         |



#### 3.2. Riepilogo Osservatori

- Carreggiata (TI) ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

|                                         | TI  |
|-----------------------------------------|-----|
| Dynamic cross section - Direzioni (0,0) | 6,5 |



#### 3.3. Riepilogo dei valori

- SR strada ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

|                                          | SR strada |
|------------------------------------------|-----------|
| Dynamic cross section - Carreggiata (SR) | 0,9       |



## 4. Summary power

### 4.1. Dynamic cross section

| Apparecchi                                                               | Quantità | Dimmeraggio | Potenza /<br>Apparecchi | Totale |
|--------------------------------------------------------------------------|----------|-------------|-------------------------|--------|
| AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572 | 63       | 100 %       | 51 W                    | 3188 W |
| AMPERA MINI 16 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 356702 | 63       | 100 %       | 26 W                    | 1625 W |

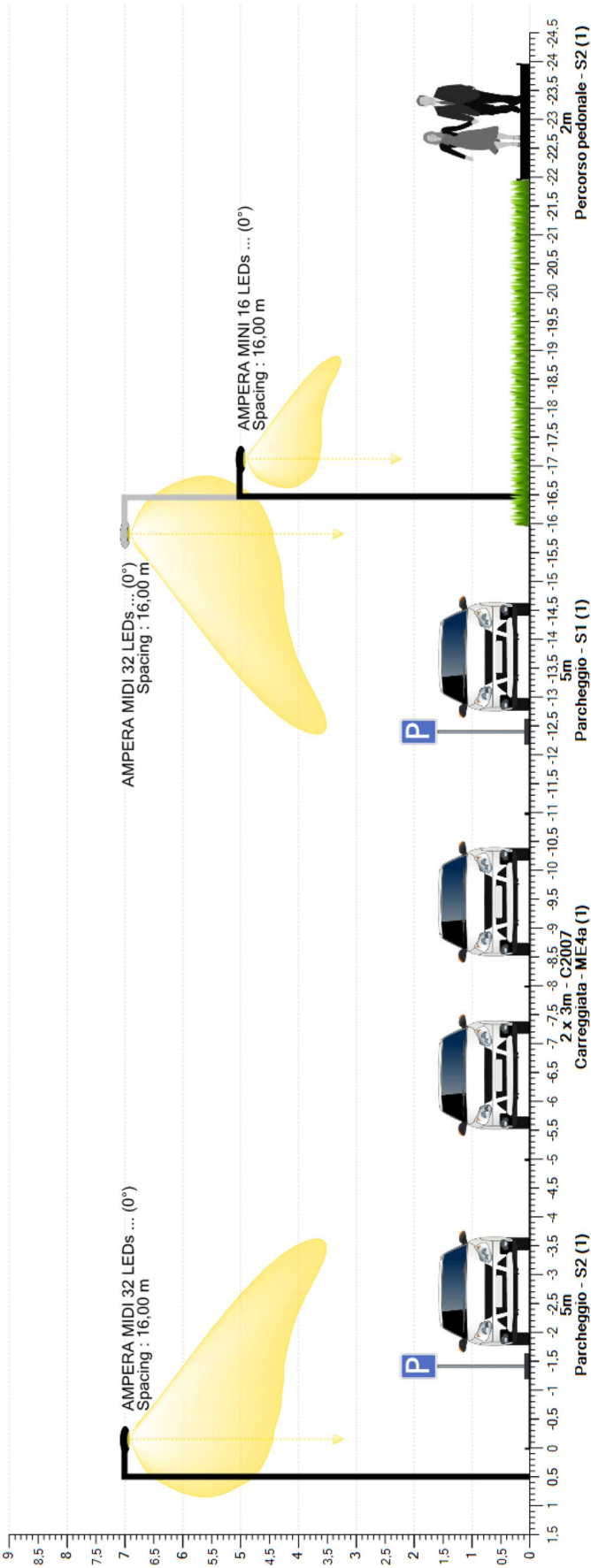
Totale : 4813 W

## 5. Profili diurni



6. Sezione incrocio

6.1. Vista2D



## 7. Dynamic cross section

### 7.1. Descrizione matrice

| Matrice | Descrizione                                                              | Flusso di lampada | Flusso apparecchio | Efficienza | FM    | Apparecchiatura                                                                     |
|---------|--------------------------------------------------------------------------|-------------------|--------------------|------------|-------|-------------------------------------------------------------------------------------|
| 351572  | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572 | 6,861             | 5,902              | 116        | 0,800 |  |
| 356702  | AMPERA MINI 16 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 356702 | 3,456             | 2,908              | 112        | 0,800 |  |

### 7.2. Posizione apparecchi

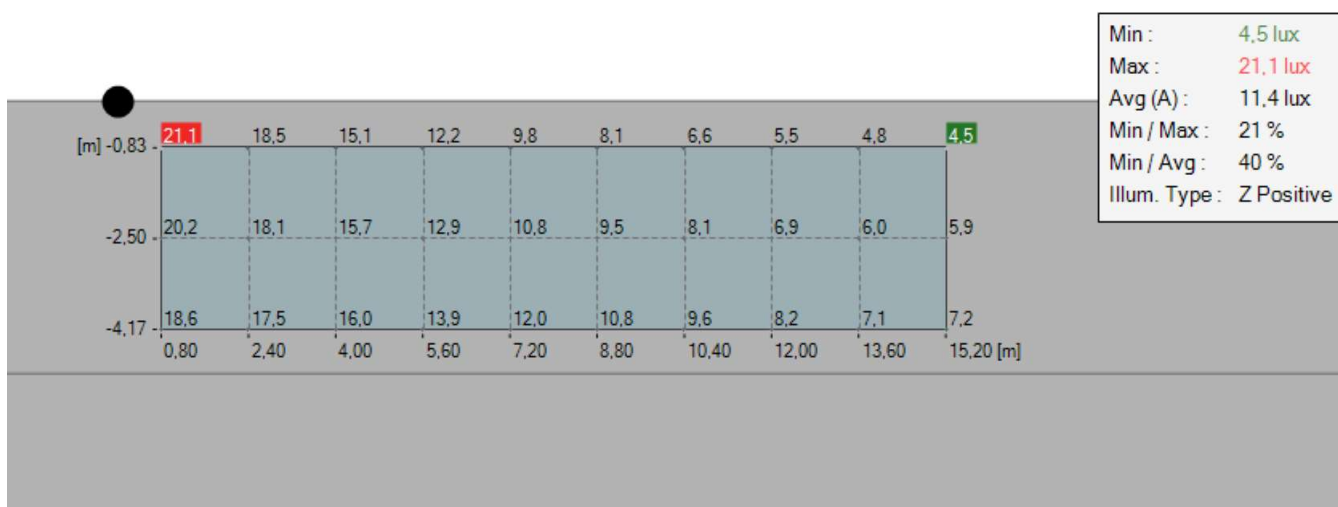
|                                     | N° | Posizione |        |       | Apparecchio |                                              |        |        |         |              |       |
|-------------------------------------|----|-----------|--------|-------|-------------|----------------------------------------------|--------|--------|---------|--------------|-------|
|                                     |    | X [m]     | Y [m]  | Z [m] | Matrice     | Descrizione                                  | Az [°] | TI [°] | Rot [°] | Flusso [klm] | FM    |
| <input checked="" type="checkbox"/> | 1  | -32,00    | 0,00   | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 2  | -16,00    | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 3  | -16,00    | -16,00 | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 0,0    | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 4  | 0,00      | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 5  | 0,00      | 0,00   | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 6  | 16,00     | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 7  | 16,00     | -16,00 | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 0,0    | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 8  | 32,00     | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 9  | 32,00     | 0,00   | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 10 | 48,00     | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 11 | 48,00     | -16,00 | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 0,0    | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 12 | 64,00     | -17,00 | 5,00  | 356702      | AMPERA MINI 16 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 3,456        | 0,800 |
| <input checked="" type="checkbox"/> | 13 | 64,00     | 0,00   | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 14 | 80,00     | -16,00 | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 0,0    | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 15 | 96,00     | 0,00   | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0  | 0,0    | 0,0     | 6,861        | 0,800 |
| <input checked="" type="checkbox"/> | 16 | 112,00    | -16,00 | 7,00  | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 0,0    | 0,0    | 0,0     | 6,861        | 0,800 |

### 7.3. Gruppi apparecchi

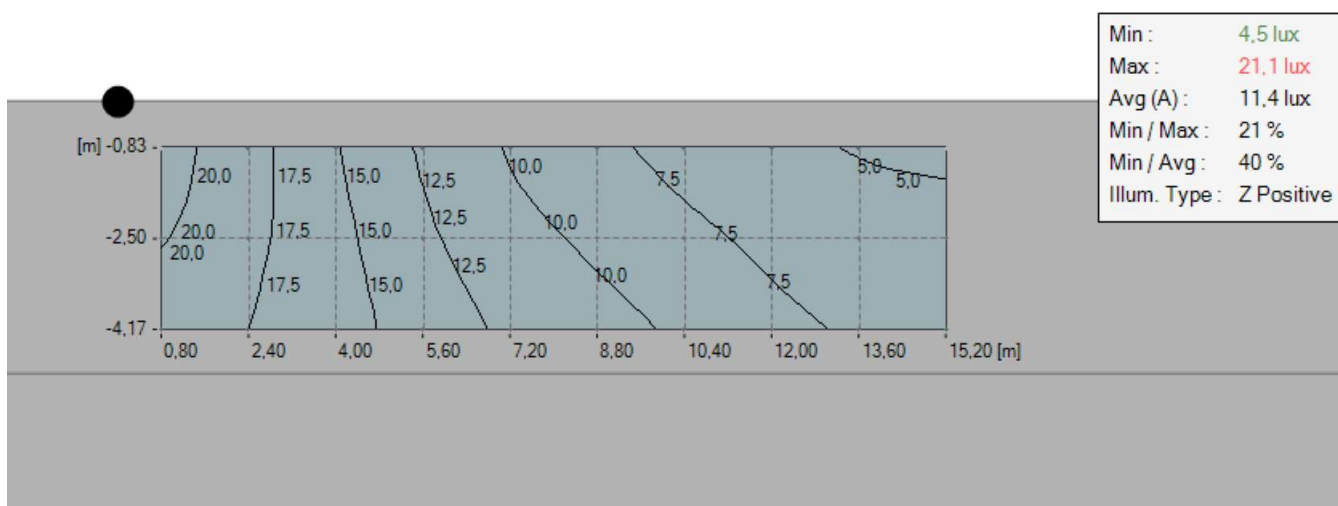
| Lineare                             |    |           |        |       |             |        |        |         |         |            |              |            |           |       |       |
|-------------------------------------|----|-----------|--------|-------|-------------|--------|--------|---------|---------|------------|--------------|------------|-----------|-------|-------|
|                                     | N° | Posizione |        |       | Apparecchio |        |        |         |         | Dimensioni |              |            | Rotazione |       |       |
|                                     |    | X [m]     | Y [m]  | Z [m] | Matrice     | Az [°] | Tl [°] | Rot [°] | Dim [%] | Conteggi o | Distanza [m] | Taglia [m] | X [°]     | Y [°] | Z [°] |
| <input checked="" type="checkbox"/> | 1  | -32,00    | 0,00   | 7,00  | 351572      | 180,0  | 0,0    | 0,0     | 100     | 5          | 32,00        | 128,00     | 0,0       | 0,0   | 0,0   |
| <input checked="" type="checkbox"/> | 2  | -16,00    | -17,00 | 5,00  | 356702      | 180,0  | 0,0    | 0,0     | 100     | 6          | 16,00        | 80,00      | 0,0       | 0,0   | 0,0   |
| <input checked="" type="checkbox"/> | 3  | -16,00    | -16,00 | 7,00  | 351572      | 0,0    | 0,0    | 0,0     | 100     | 5          | 32,00        | 128,00     | 0,0       | 0,0   | 0,0   |

## 7.4. Parcheggio (IL) - Illuminamento Z positivo

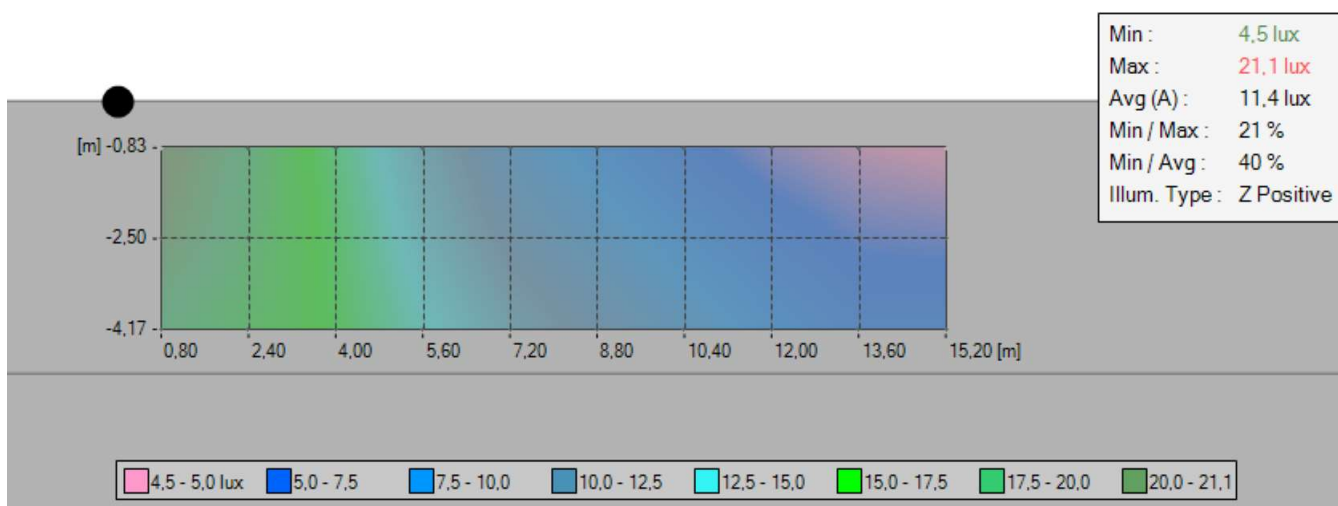
Valori



Isolinee



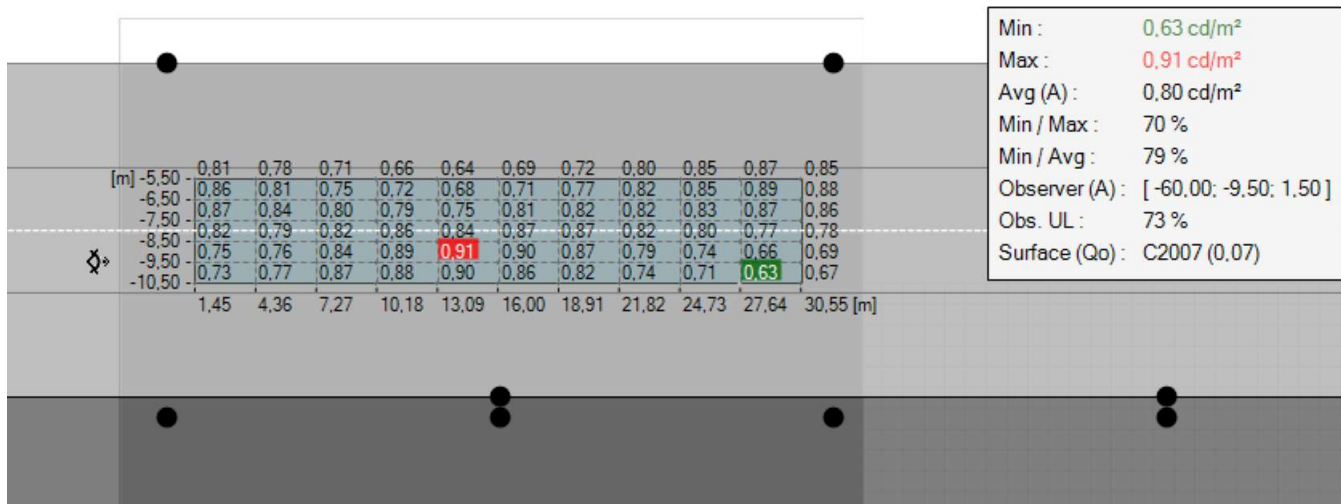
Ombre



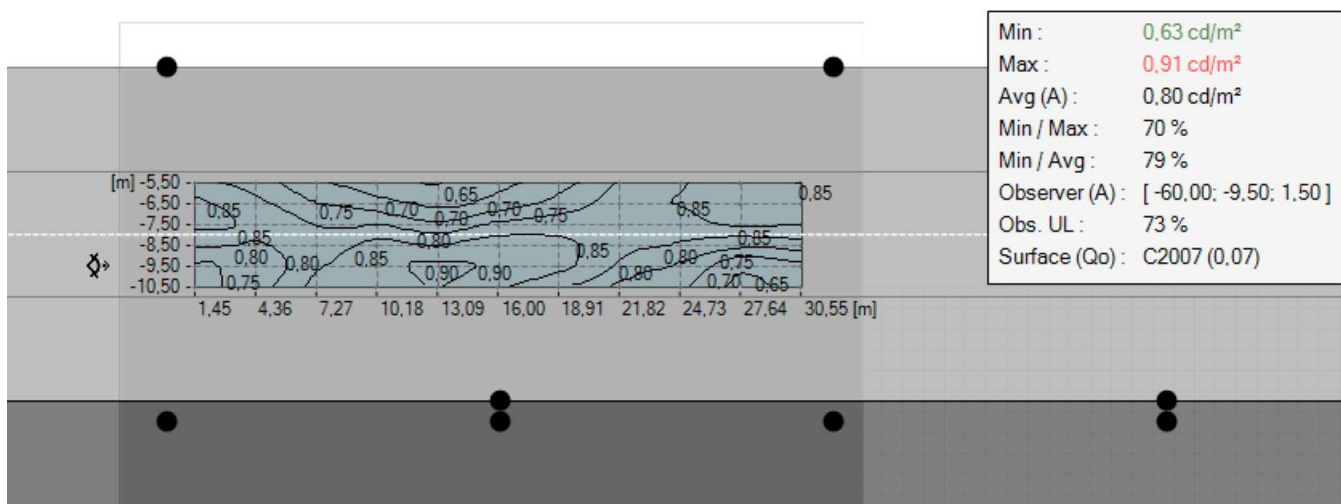
## 7.5. Carreggiata (LU) - C2007 - Luminanza

## 7.5.1. Carreggiata (LU) - Luminanza - Osservatore assoluta

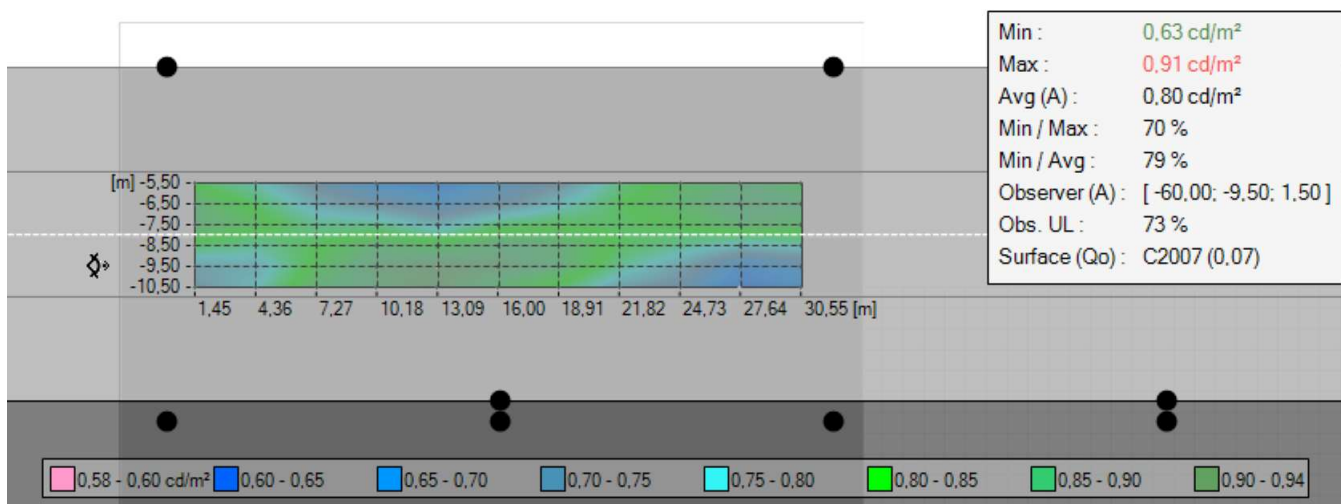
Valori



Isolinee

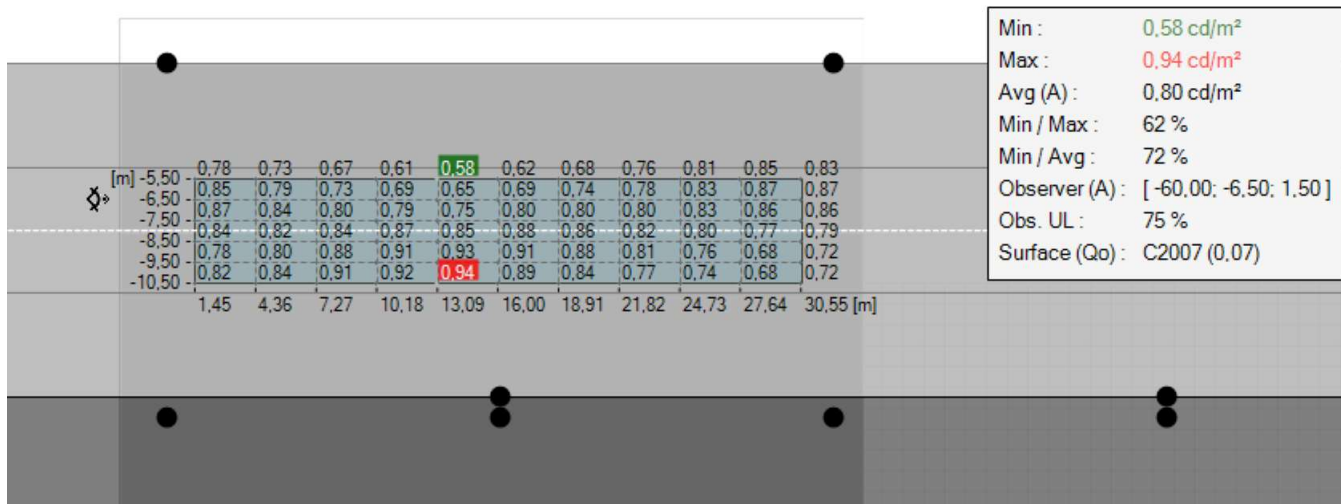


Ombre

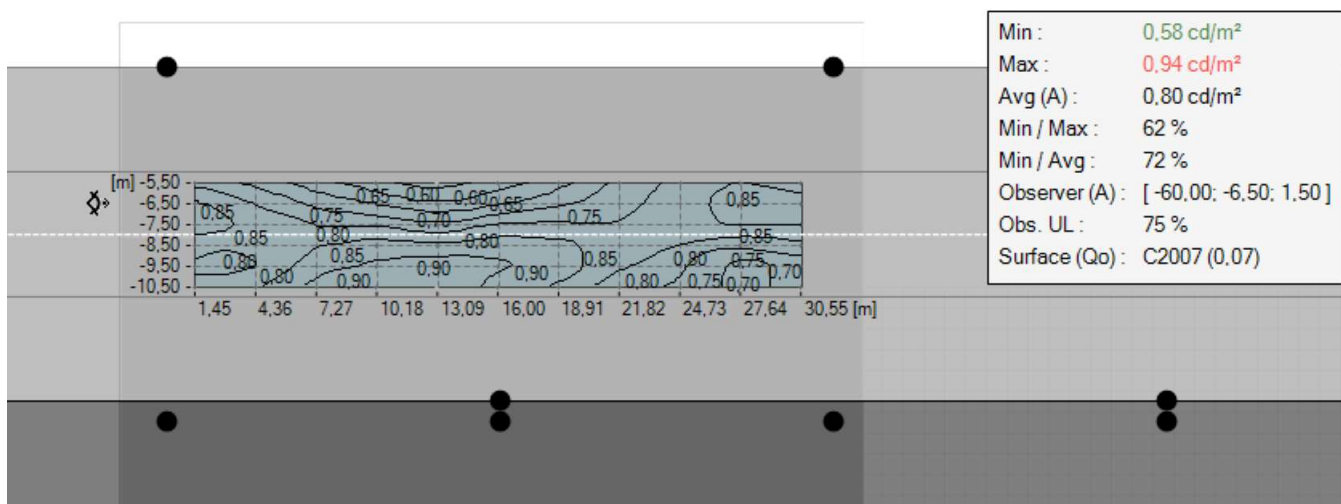


## 7.5.2. Carreggiata (LU) - Luminanza - Osservatore assoluta

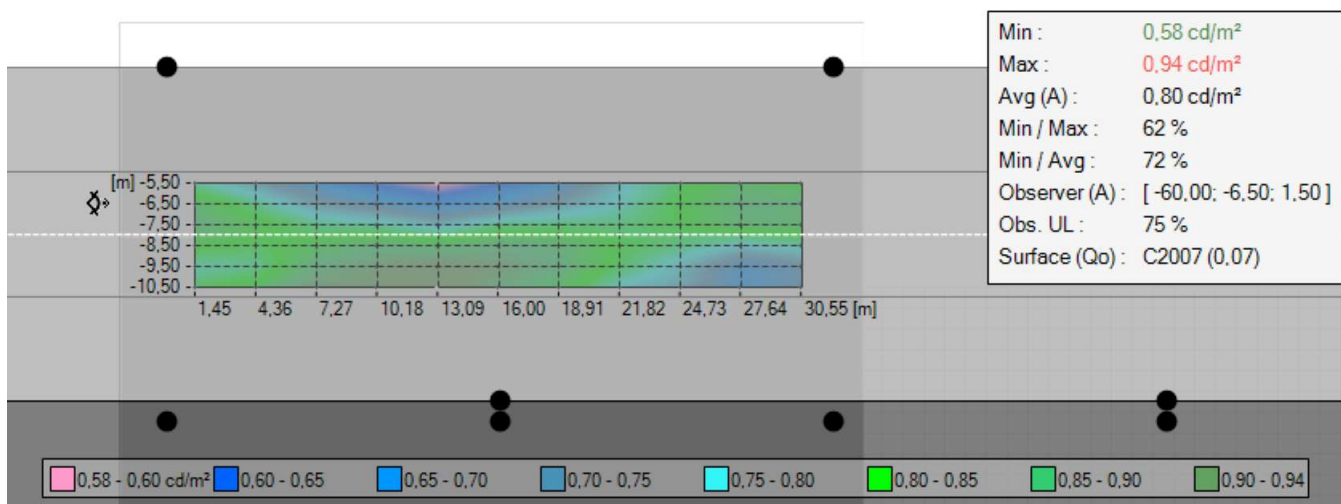
Valori



Isolinee



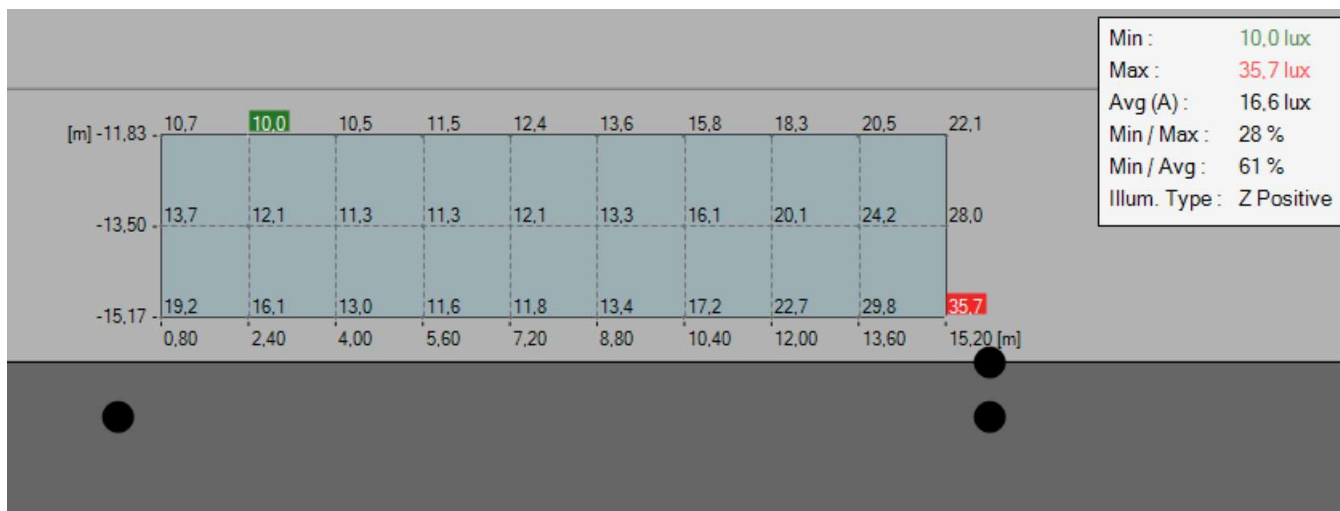
Ombre



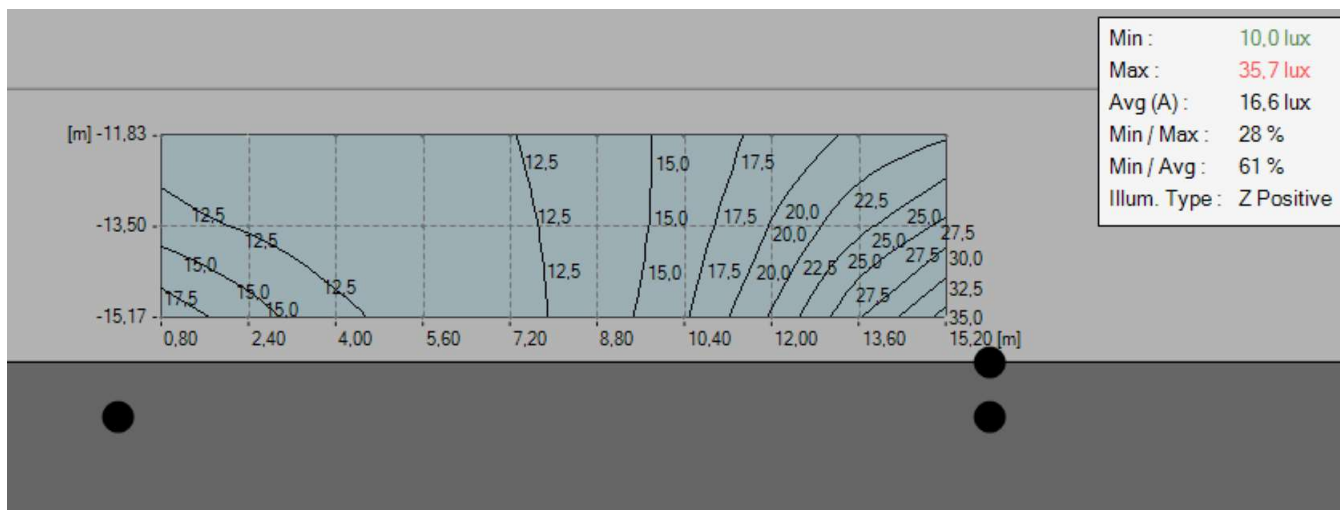


## 7.6. Parcheggio (IL) (1) - Illuminamento Z positivo

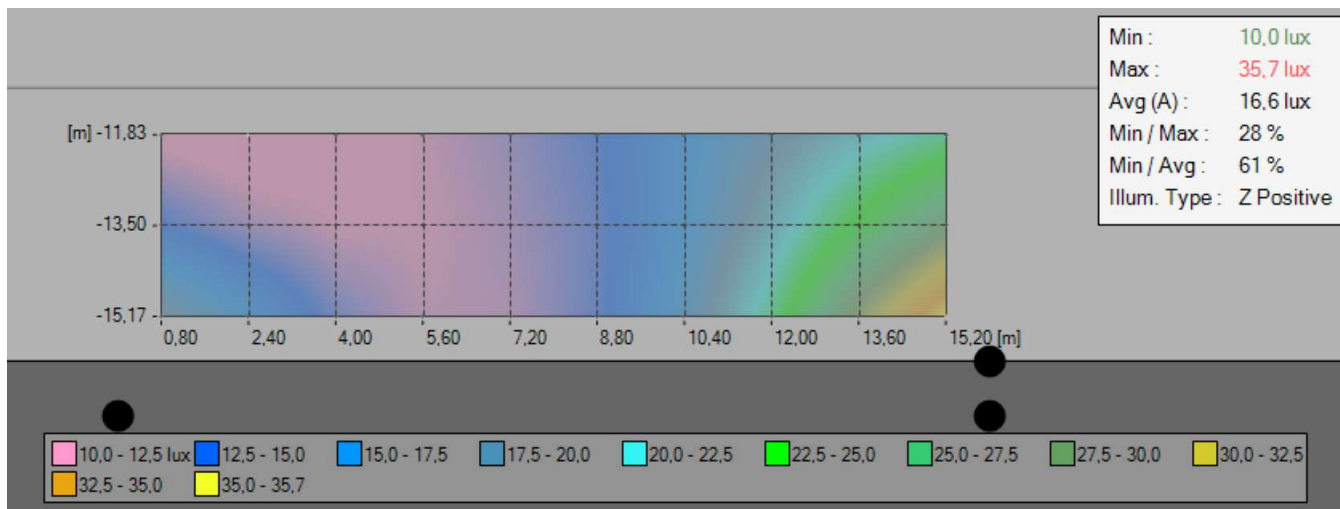
Valori



Isolinee

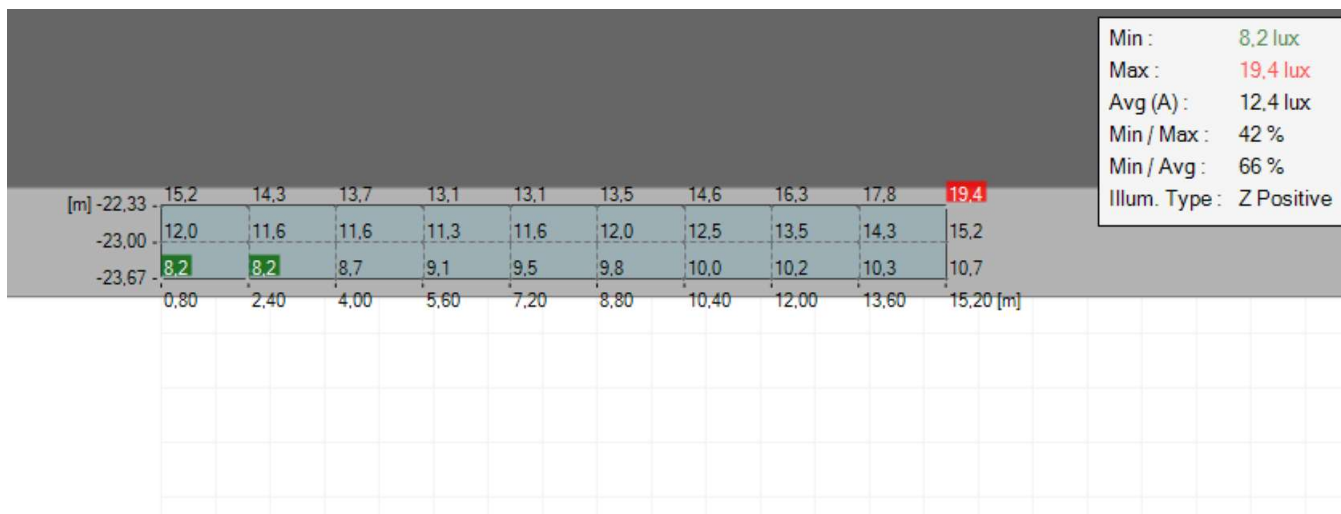


Ombre

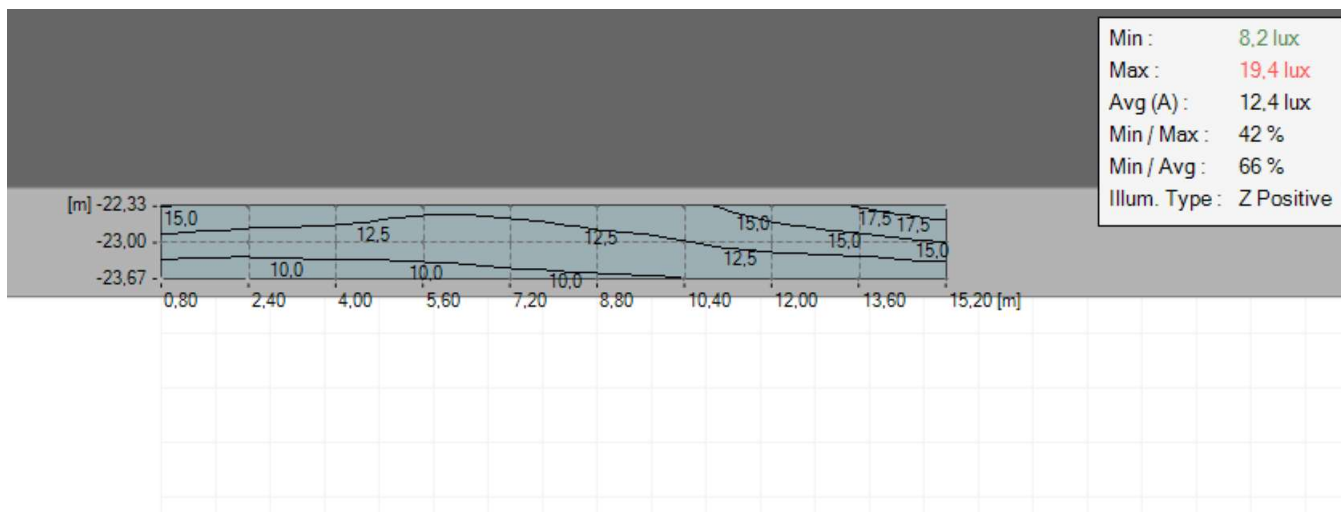


## 7.7. Percorso pedonale (IL) - Illuminamento Z positivo

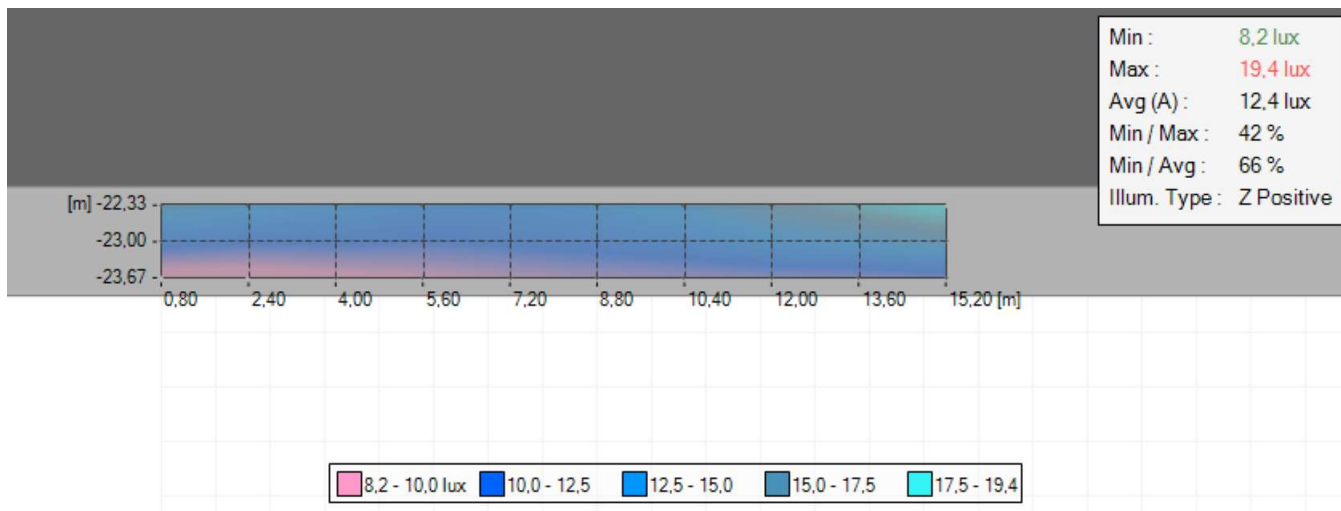
Valori



Isolinee



Ombre



## 8. Griglie

### 8.1. Parcheggio (IL)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

 X :       Y :       Z :  m

##### Rotazione

 X :       Y :       Z :  °

##### Dimensione

|               |                                    |               |                                   |   |
|---------------|------------------------------------|---------------|-----------------------------------|---|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>    |   |
| Distanza X :  | <input type="text" value="1,60"/>  | Distanza Y :  | <input type="text" value="1,67"/> | m |
| Taglia X :    | <input type="text" value="14,40"/> | Taglia Y :    | <input type="text" value="3,33"/> | m |

### 8.2. Carreggiata (LU)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

 X :       Y :       Z :  m

##### Rotazione

 X :       Y :       Z :  °

##### Dimensione

|               |                                    |               |                                   |   |
|---------------|------------------------------------|---------------|-----------------------------------|---|
| Conteggio X : | <input type="text" value="11"/>    | Conteggio Y : | <input type="text" value="6"/>    |   |
| Distanza X :  | <input type="text" value="2,91"/>  | Distanza Y :  | <input type="text" value="1,00"/> | m |
| Taglia X :    | <input type="text" value="29,09"/> | Taglia Y :    | <input type="text" value="5,00"/> | m |



### 8.3. Parcheggio (IL) (1)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                     |
|---------------|------------------------------------|---------------|-------------------------------------|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>      |
| Distanza X :  | <input type="text" value="1,60"/>  | Distanza Y :  | <input type="text" value="1,67"/> m |
| Taglia X :    | <input type="text" value="14,40"/> | Taglia Y :    | <input type="text" value="3,33"/> m |

### 8.4. Percorso pedonale (IL)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                     |
|---------------|------------------------------------|---------------|-------------------------------------|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>      |
| Distanza X :  | <input type="text" value="1,60"/>  | Distanza Y :  | <input type="text" value="0,67"/> m |
| Taglia X :    | <input type="text" value="14,40"/> | Taglia Y :    | <input type="text" value="1,33"/> m |

## 9. Osservatore

### 9.1. Carreggiata (TI)

#### General

Tipologia : Osservatore lineare

It : ☒\_Color : 

#### \_Calculation

\_Calculation : TI - Griglia

Direzioni : 0,0

Griglia : Carreggiata (TI)

#### Geometry

##### Origine

X : -15,13

Y : -9,50

Z : 1,50 m

##### Rotazione

X : 0,0

Y : 0,0

Z : 0,0 °

##### Dimension

Conteggio : 10

Distanza : 3,20 m

Size : 28,80 m

**Ulysse 3**



# Lottizzazione, Villasanta

(CIE 140)

Progettista : aquattroccolo  
Progetto # : 196Q16R

Studio # : Via Turati  
Data : 04/05/2016

Schröder S.p.A.  
Via Val della Torre 131  
10040 Caselette (TO)

[www.schreder.com](http://www.schreder.com)

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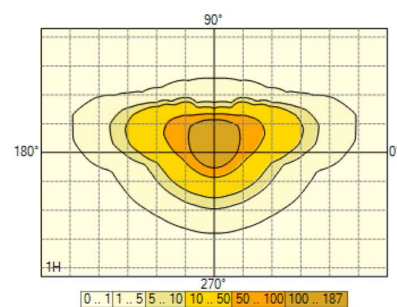
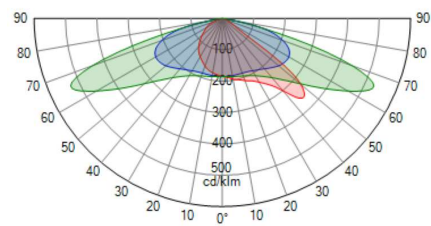
# 1. Apparecchi

## 1.1. AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572



|              |                                 |
|--------------|---------------------------------|
| Tipologia    | AMPERA MIDI                     |
| Riflettore   | 5139                            |
| Sorgente     | 32 LEDs 500mA NW                |
| Protettore   | Flat, Glass Extra Clear, Smooth |
| Impostazioni |                                 |
| Flusso di    | 6,9 klm                         |
| Classe - G   | 4                               |

|                    |           |
|--------------------|-----------|
| Potenza            | 51,0 W    |
| Potenza            | 51,0 W    |
| Efficienza         | 116 lm/W  |
| Flusso apparecchio | 5,902 klm |
| FM                 | 0,80      |
| Matrice            | 351572    |

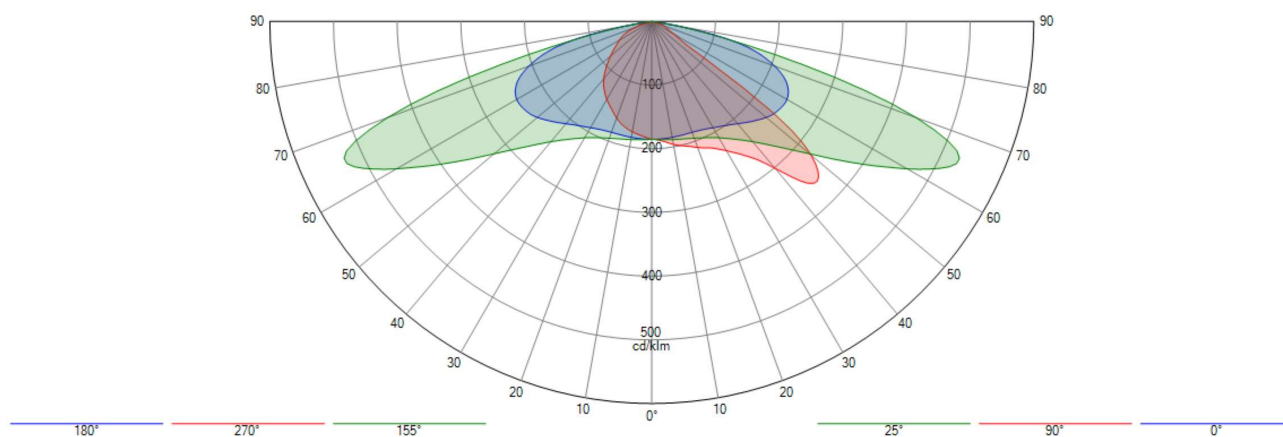


## 2. Documentazione Fotometrica

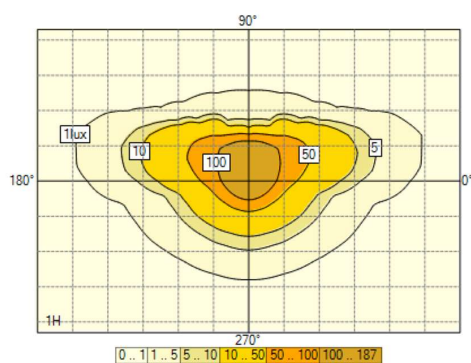
### 2.1. AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572

351572

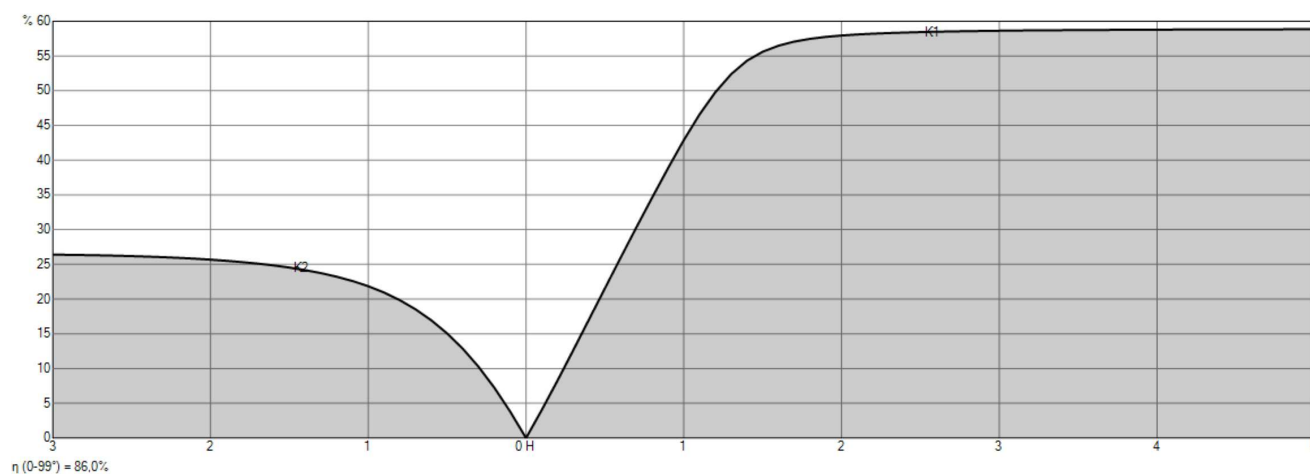
Diagramma Polare/Cartesiano



Isolux



Rappresentazione del coef. di utilizzazione



### 3. Risultati

#### 3.1. Riepilogo Griglia

- Marciapiede lato pali (IL)

S2 (1) (IL : Min = 3,00 lux Ave = 10,00 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 12,4              | 45             | 26             | 5,6          | 21,5         |



- Carreggiata (LU)

ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

##### 1. Luminanza - C2007

|                                                             | Medio<br>(M)<br>(cd/m <sup>2</sup> ) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(cd/m <sup>2</sup> ) | Max<br>(cd/m <sup>2</sup> ) | UL (%) |
|-------------------------------------------------------------|--------------------------------------|----------------|----------------|-----------------------------|-----------------------------|--------|
| Dynamic cross section - Osservatore 1 (-60,00; -5,25; 1,50) | 0,93                                 | 66             | 45             | 0,61                        | 1,37                        | 84 %   |
| Dynamic cross section - Osservatore 2 (-60,00; -2,75; 1,50) | 0,86                                 | 68             | 46             | 0,58                        | 1,26                        | 80 %   |



- Parcheggio (IL)

S2 (1) (IL : Min = 3,00 lux Ave = 10,00 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 11,7              | 75             | 54             | 8,7          | 16,1         |



- Marciapiede lato opposto (IL)

S3 (1) (IL : Min = 1,50 lux Ave = 7,50 lux)

##### 1. Illuminamento Z positivo

|                       | Medio<br>(M)(lux) | Min/Med<br>(%) | Min/Med<br>(%) | Min<br>(lux) | Max<br>(lux) |
|-----------------------|-------------------|----------------|----------------|--------------|--------------|
| Dynamic cross section | 7,5               | 74             | 53             | 5,6          | 10,5         |



#### 3.2. Riepilogo Osservatori

- Carreggiata (TI) ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

|                                         | TI  |
|-----------------------------------------|-----|
| Dynamic cross section - Direzioni (0,0) | 8,0 |



#### 3.3. Riepilogo dei valori

- SR strada ME4a (1) (LU : Ave = 0,75 cd/m<sup>2</sup> Uo = 40 % UI = 60 % TI : 15 SR : 0,50)

|                                          | SR strada |
|------------------------------------------|-----------|
| Dynamic cross section - Carreggiata (SR) | 0,9       |





## 4. Summary power

### 4.1. Dynamic cross section

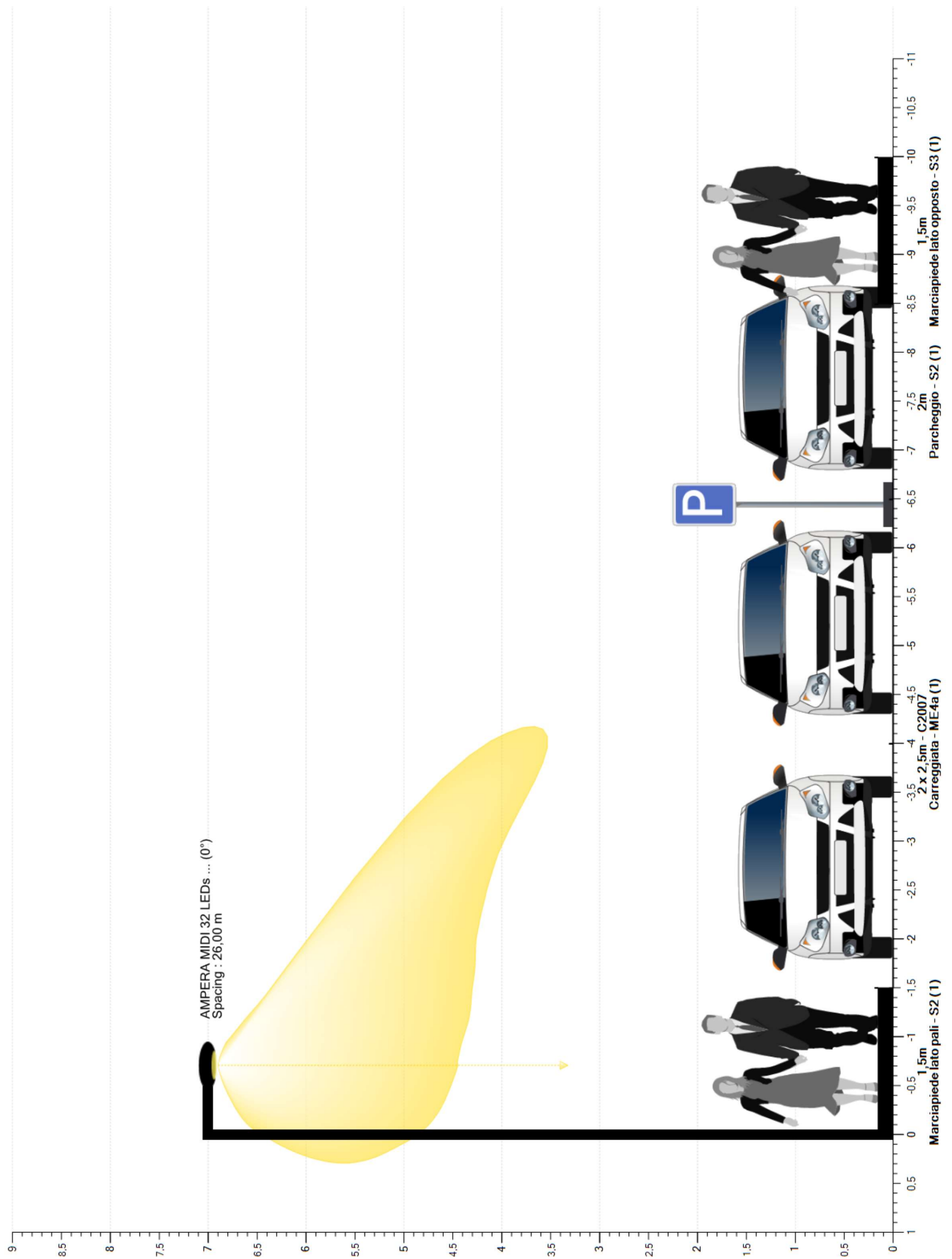
| Apparecchi                                                               | Quantità | Dimmeraggio | Potenza /<br>Apparecchi | Totale |
|--------------------------------------------------------------------------|----------|-------------|-------------------------|--------|
| AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572 | 38       | 100 %       | 51 W                    | 1962 W |

Totale : 1962 W

## 5. Profili diurni

## 6. Sezione incrocio

### 6.1. Vista2D



## 7. Dynamic cross section

### 7.1. Descrizione matrice

| Matrice | Descrizione                                                              | Flusso di lampada | Flusso apparecchio | Efficienza | FM    | Apparecchiatura                                                                     |
|---------|--------------------------------------------------------------------------|-------------------|--------------------|------------|-------|-------------------------------------------------------------------------------------|
| 351572  | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass Extra Clear, Smooth 5139 351572 | 6,861             | 5,902              | 116        | 0,800 |  |

### 7.2. Posizione apparecchi

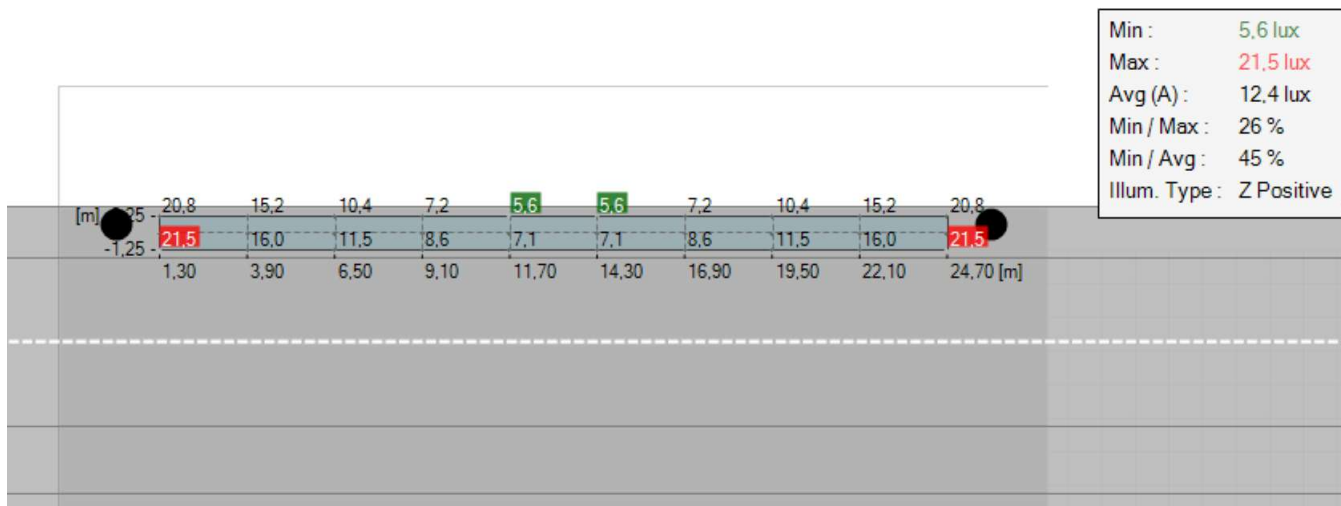
|                                     | N° | Posizione |          |          | Apparecchio |                                              |           |           |            |                 |       |
|-------------------------------------|----|-----------|----------|----------|-------------|----------------------------------------------|-----------|-----------|------------|-----------------|-------|
|                                     |    | X<br>[m]  | Y<br>[m] | Z<br>[m] | Matrice     | Descrizione                                  | Az<br>[°] | TI<br>[°] | Rot<br>[°] | Flusso<br>[klm] | FM    |
| <input checked="" type="checkbox"/> | 1  | -26,00    | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |
| <input checked="" type="checkbox"/> | 2  | 0,00      | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |
| <input checked="" type="checkbox"/> | 3  | 26,00     | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |
| <input checked="" type="checkbox"/> | 4  | 52,00     | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |
| <input checked="" type="checkbox"/> | 5  | 78,00     | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |
| <input checked="" type="checkbox"/> | 6  | 104,00    | -0,50    | 7,00     | 351572      | AMPERA MIDI 32 LEDs 500mA NW Flat, Glass ... | 180,0     | 0,0       | 0,0        | 6,861           | 0,800 |

### 7.3. Gruppi apparecchi

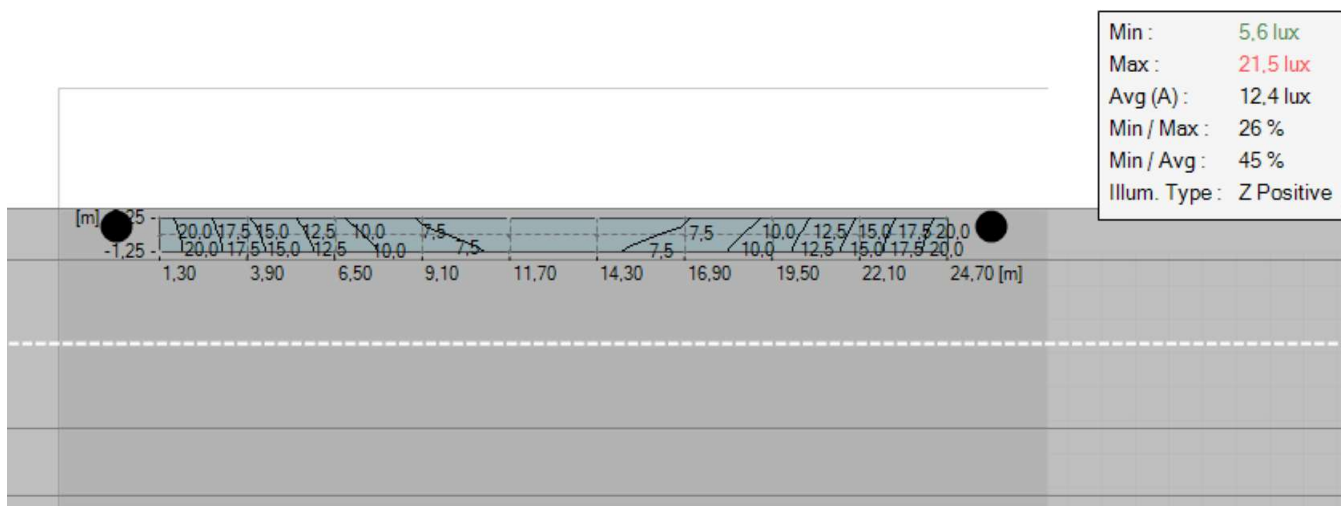
| Lineare                             |    |           |       |       |             |        |        |         |         |               |              |            |           |       |       |
|-------------------------------------|----|-----------|-------|-------|-------------|--------|--------|---------|---------|---------------|--------------|------------|-----------|-------|-------|
|                                     | N° | Posizione |       |       | Apparecchio |        |        |         |         | Dimensioni    |              |            | Rotazione |       |       |
|                                     |    | X [m]     | Y [m] | Z [m] | Matrice     | Az [°] | Ti [°] | Rot [°] | Dim [%] | Conteggi<br>o | Distanza [m] | Taglia [m] | X [°]     | Y [°] | Z [°] |
| <input checked="" type="checkbox"/> | 1  | -26,00    | -0,50 | 7,00  | 351572      | 180,0  | 0,0    | 0,0     | 100     | 6             | 26,00        | 130,00     | 0,0       | 0,0   | 0,0   |

## 7.4. Marciapiede lato pali (IL) - Illuminamento Z positivo

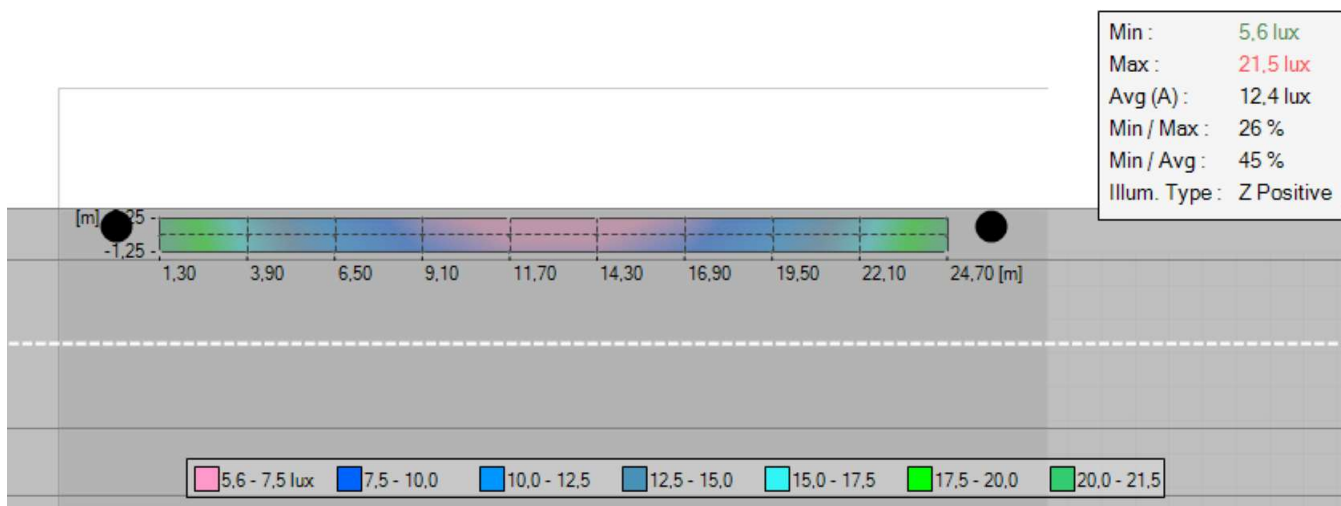
Valori



Isolinee



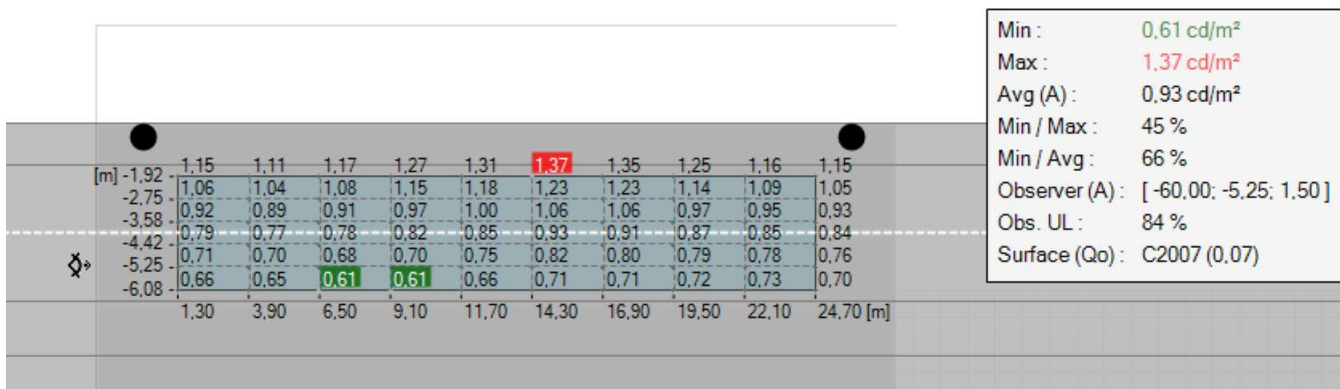
Ombre



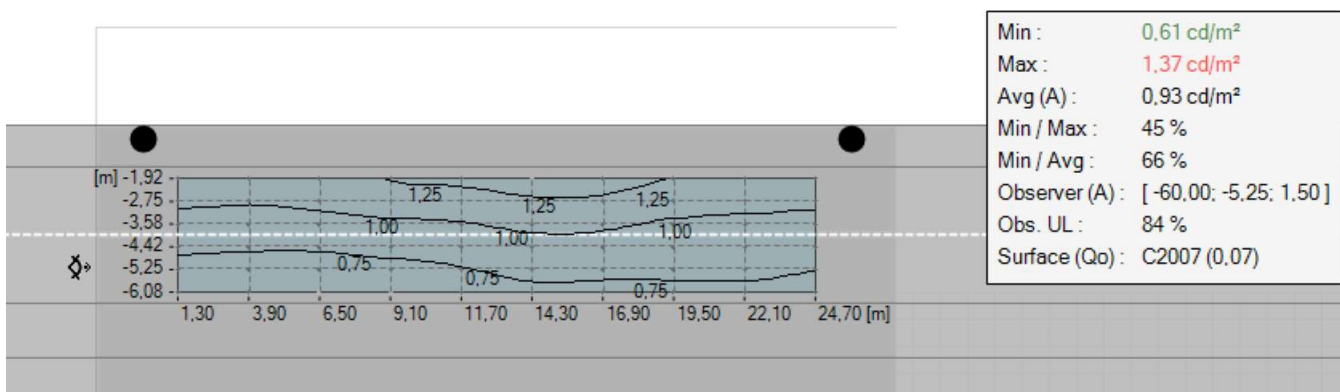
## 7.5. Carreggiata (LU) - C2007 - Luminanza

## 7.5.1. Carreggiata (LU) - Luminanza - Osservatore assoluta

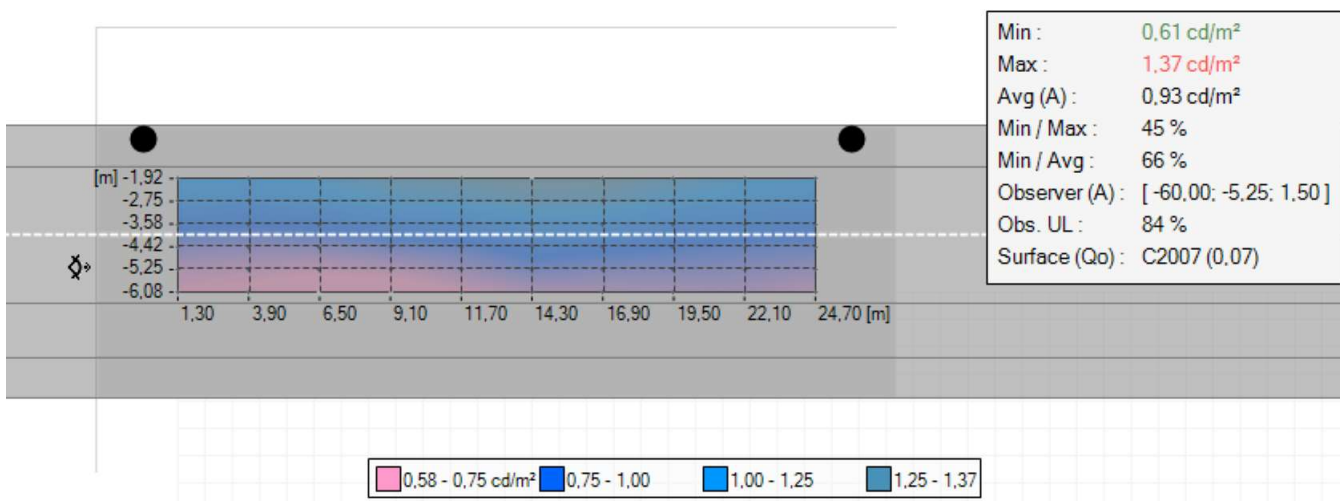
Valori



Isolinee

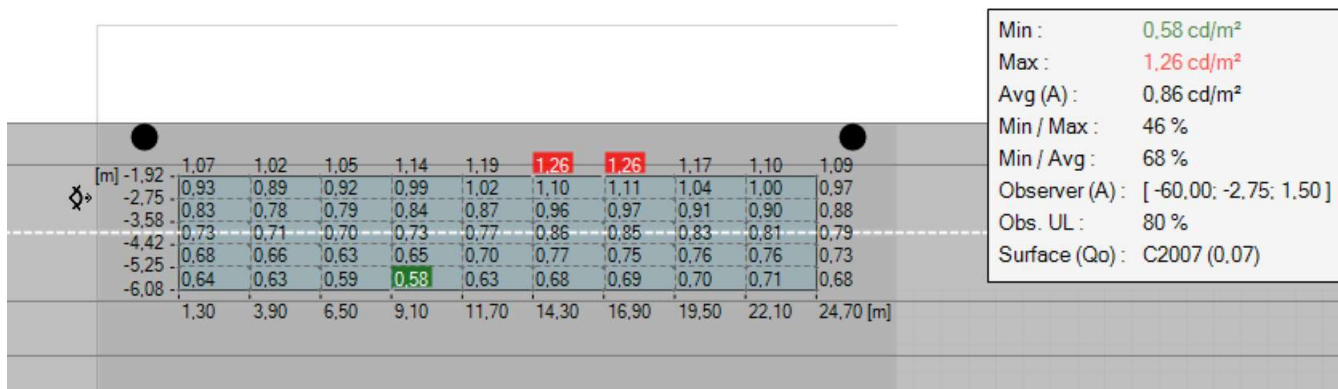


Ombre

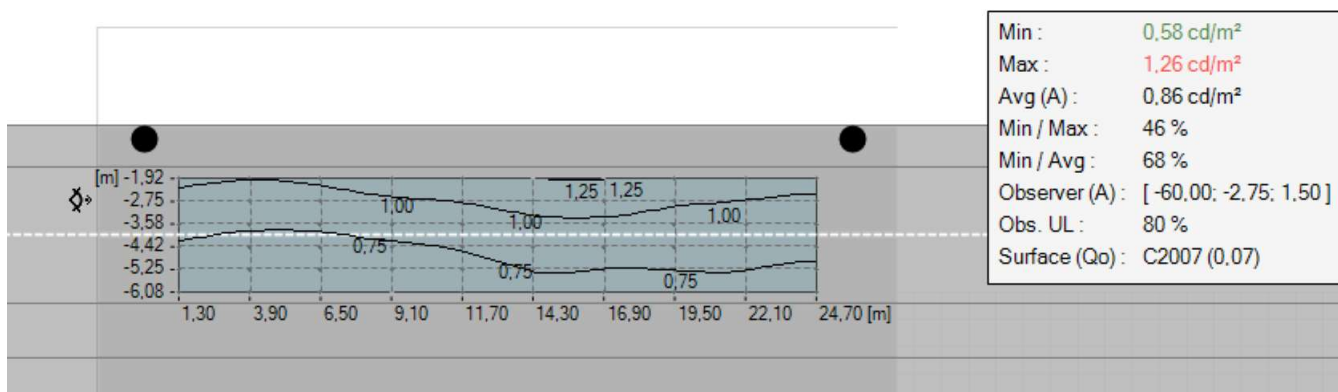


## 7.5.2. Carreggiata (LU) - Luminanza - Osservatore assoluta

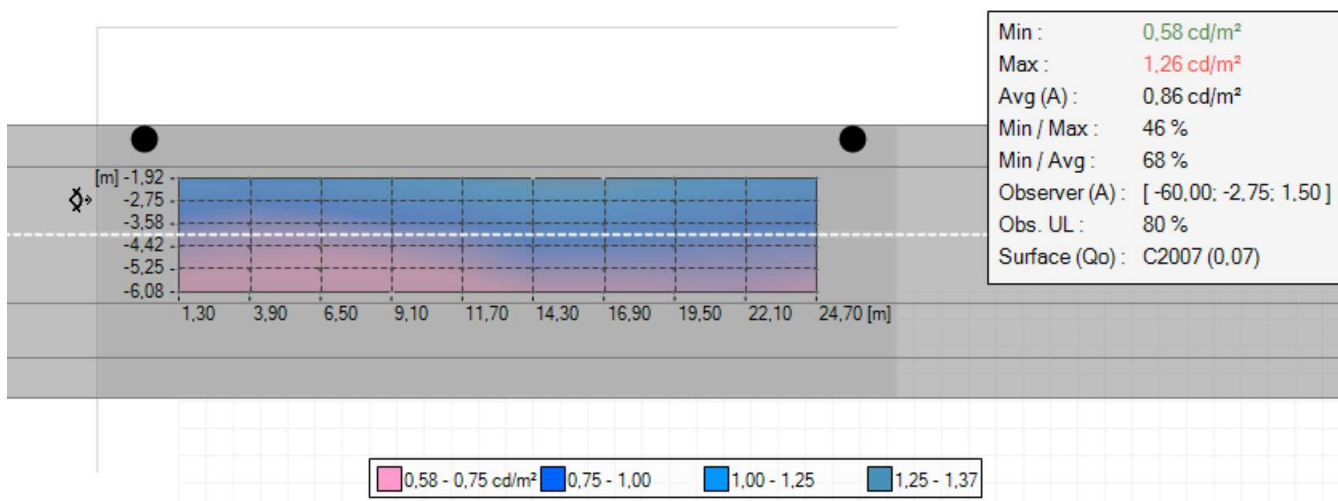
Valori



Isolinee

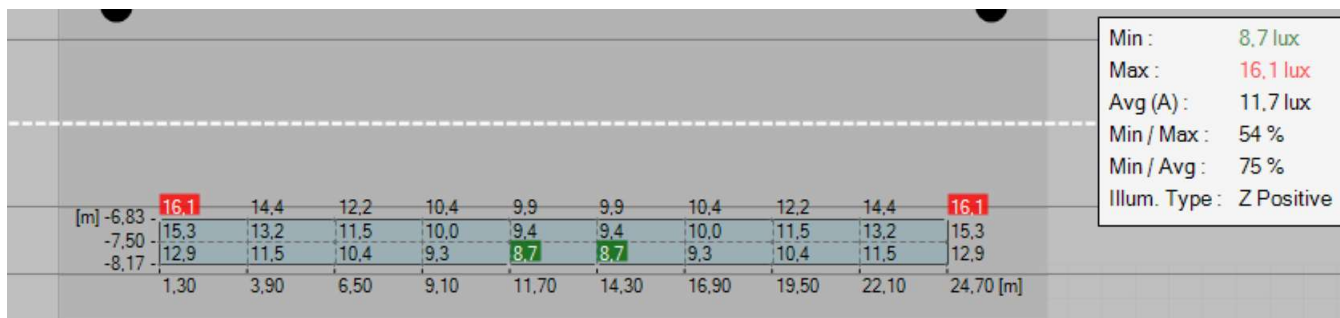


Ombre

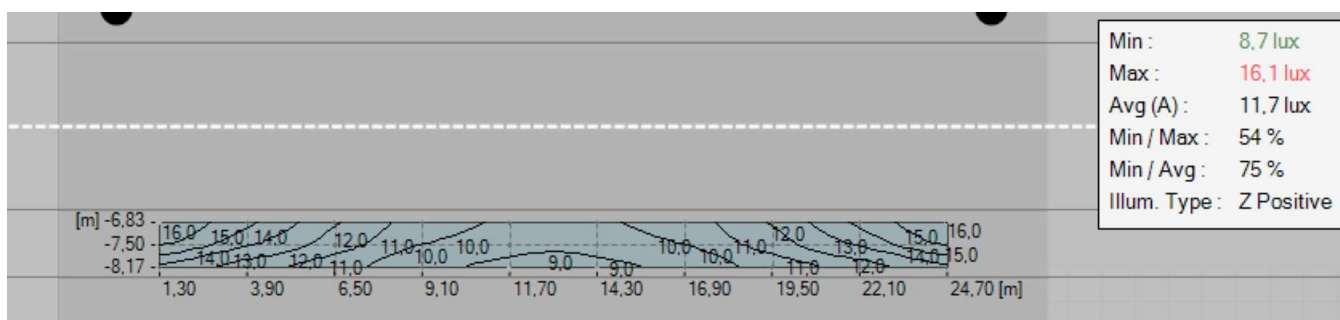


## 7.6. Parcheggio (IL) - Illuminamento Z positivo

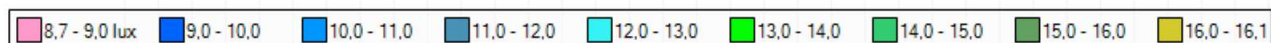
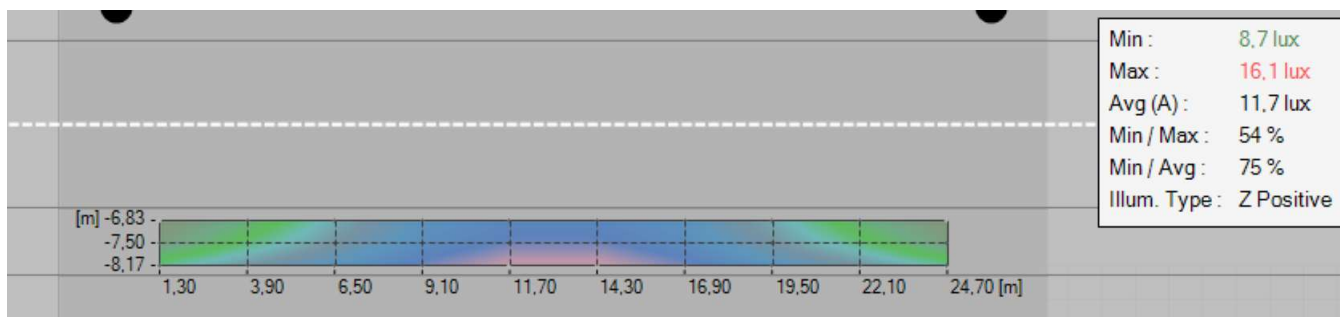
Valori



Isolinee



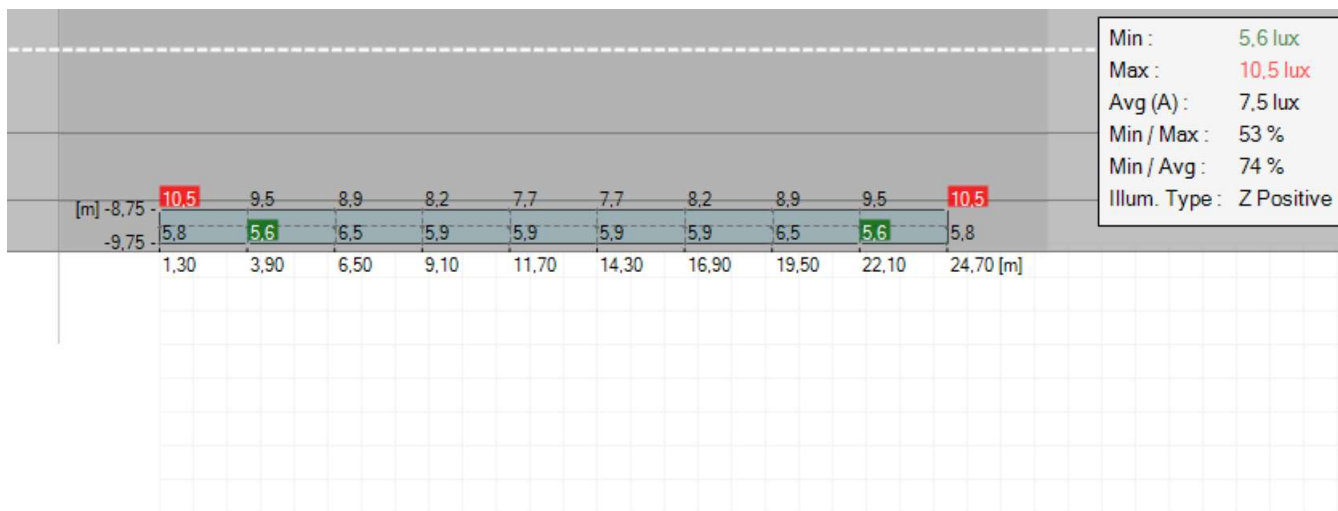
Ombre



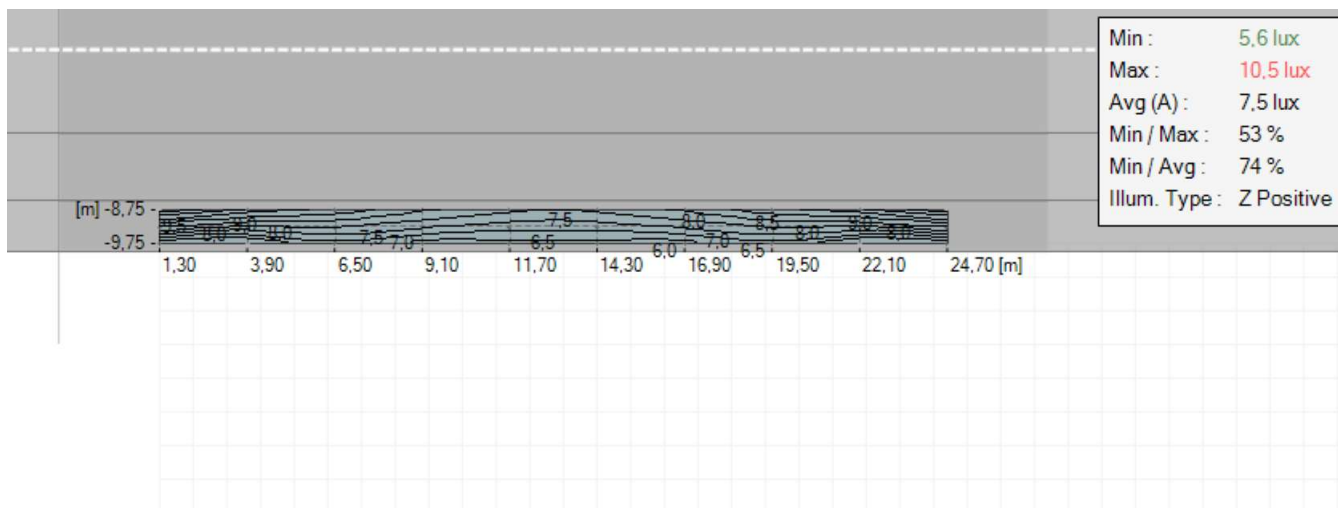


## 7.7. Marciapiede lato opposto (IL) - Illuminamento Z positivo

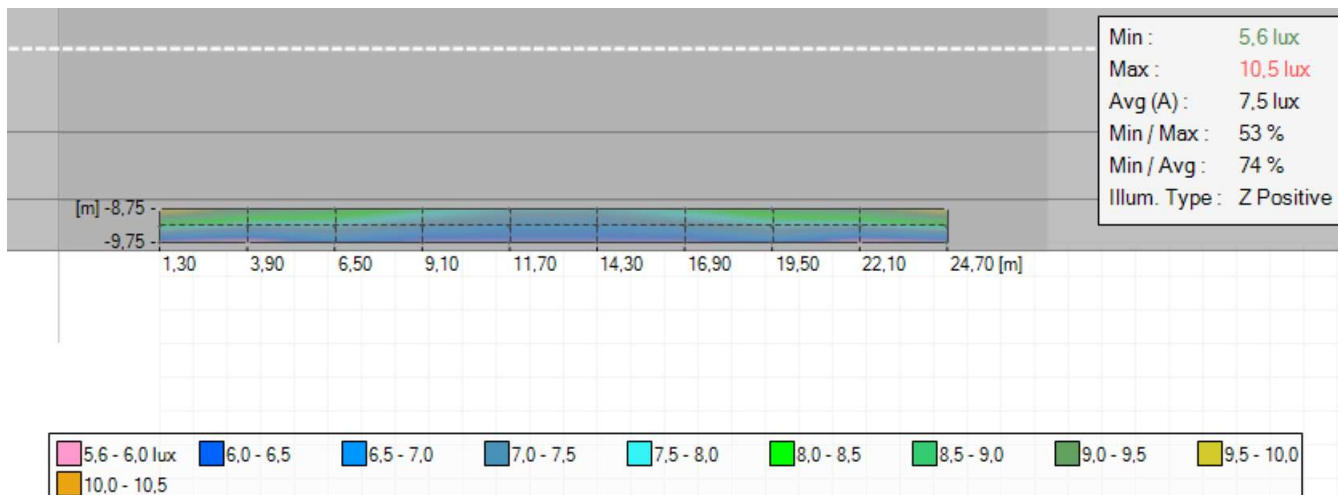
Valori



Isolinee



Ombre





## 8. Griglie

### 8.1. Marciapiede lato pali (IL)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                   |   |
|---------------|------------------------------------|---------------|-----------------------------------|---|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>    |   |
| Distanza X :  | <input type="text" value="2,60"/>  | Distanza Y :  | <input type="text" value="0,50"/> | m |
| Taglia X :    | <input type="text" value="23,40"/> | Taglia Y :    | <input type="text" value="1,00"/> | m |

### 8.2. Carreggiata (LU)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                   |   |
|---------------|------------------------------------|---------------|-----------------------------------|---|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="6"/>    |   |
| Distanza X :  | <input type="text" value="2,60"/>  | Distanza Y :  | <input type="text" value="0,83"/> | m |
| Taglia X :    | <input type="text" value="23,40"/> | Taglia Y :    | <input type="text" value="4,17"/> | m |

### 8.3. Parcheggio (IL)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                     |
|---------------|------------------------------------|---------------|-------------------------------------|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>      |
| Distanza X :  | <input type="text" value="2,60"/>  | Distanza Y :  | <input type="text" value="0,67"/> m |
| Taglia X :    | <input type="text" value="23,40"/> | Taglia Y :    | <input type="text" value="1,33"/> m |

### 8.4. Marciapiede lato opposto (IL)

#### Generale

Tipologia : Griglia rettangolare XY

Uso Esclusivo : -

It : ☒Colore : 

#### Geometria

##### Origine

X :  Y :  Z :  m

##### Rotazione

X :  Y :  Z :  °

##### Dimensione

|               |                                    |               |                                     |
|---------------|------------------------------------|---------------|-------------------------------------|
| Conteggio X : | <input type="text" value="10"/>    | Conteggio Y : | <input type="text" value="3"/>      |
| Distanza X :  | <input type="text" value="2,60"/>  | Distanza Y :  | <input type="text" value="0,50"/> m |
| Taglia X :    | <input type="text" value="23,40"/> | Taglia Y :    | <input type="text" value="1,00"/> m |

## 9. Osservatore

### 9.1. Carreggiata (TI)

#### General

Tipologia : Osservatore lineare

It : ☒\_Color : 

#### \_Calculation

\_Calculation : TI - Griglia

Direzioni : 0,0

Griglia : Carreggiata (TI)

#### Geometry

##### Origine

X : -15,13

Y : -5,25

Z : 1,50 m

##### Rotazione

X : 0,0

Y : 0,0

Z : 0,0 °

##### Dimension

Conteggio : 10

Distanza : 2,60 m

Size : 23,40 m