# Dixons Newall Green Academy-250 Lux

Date: 07-05-2025

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The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

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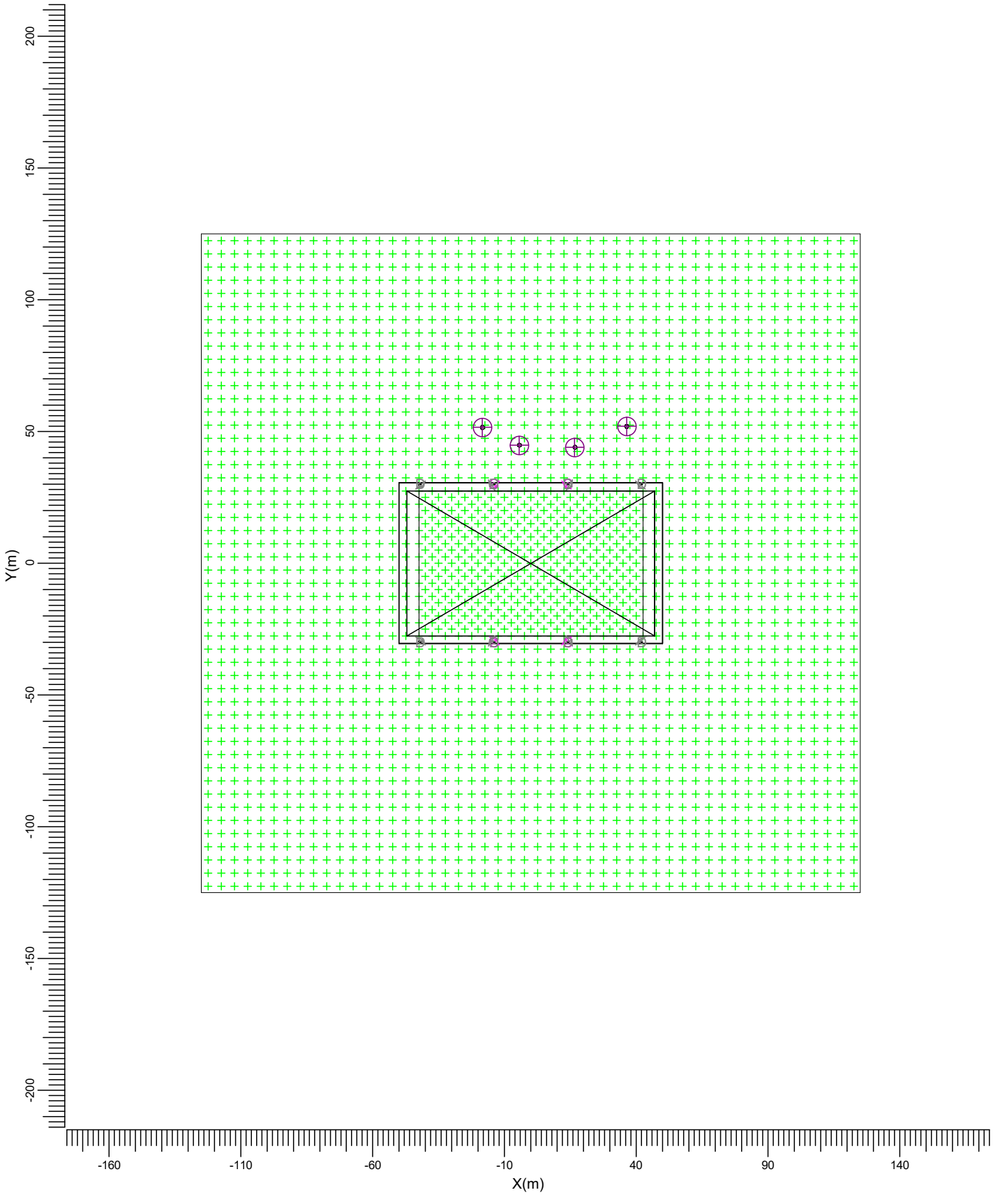
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# 1. Project Description

## 1.1 Top Project Overview




Scale
1:2000

# 2. Summary

## 2.1 Observer Information

| Code | Observer | Position | | |
|---|---|---|---|---|
| | | X (m) | Y (m) | Z (m) |
| Aa | House 1 | -18.39 | 51.51 | 3.00 |
| Bb | House 2 | -4.37 | 44.80 | 3.00 |
| Cc | House 3 | 16.66 | 43.99 | 3.00 |
| Dd | House 4 | 36.37 | 51.91 | 3.00 |

## 2.2 Obstacle Information

| Obstacle | Transparency (%) | Position | | |
|---|---|---|---|---|
| | | X (m) | Y (m) | Z (m) |
| Corner Back | 0 | -41.93 | 30.01 | 14.90 |
| | | 41.93 | 30.01 | 14.90 |
| | | -41.93 | -30.01 | 14.90 |
| | | 41.93 | -30.01 | 14.90 |
| Middle | 20 | -13.93 | 30.01 | 14.90 |
| | | 13.93 | 30.01 | 14.90 |
| | | -13.93 | -30.01 | 14.90 |
| | | 13.93 | -30.01 | 14.90 |

## 2.3 Project Luminaires

| Code | Qty | Luminaire Type | Lamp Type | Power (W) | Flux (lm) |
|---|---|---|---|---|---|
| C | 4 | Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI- | 1 * Lichtstrom: 100 % \| Dim-Lin: 2 | 1517.1 | 1 * 175000 |
| D | 8 | Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI- | 1 * Lichtstrom: 100 % \| Dim-Lin: 2 | 1517.1 | 1 * 117000 |

The total installed power: 18.21 (kWatt)

## 2.4 Calculation Results

(Il)luminance Calculations:

| Calculation | Type | Unit | Ave | Min/Ave | Min/Max |
|---|---|---|---|---|---|
| Spill | Surface Illuminance | lux | 24.9 | 0.00 | 0.00 |
| Lacrosse | Surface Illuminance | lux | 278 | 0.60 | 0.37 |

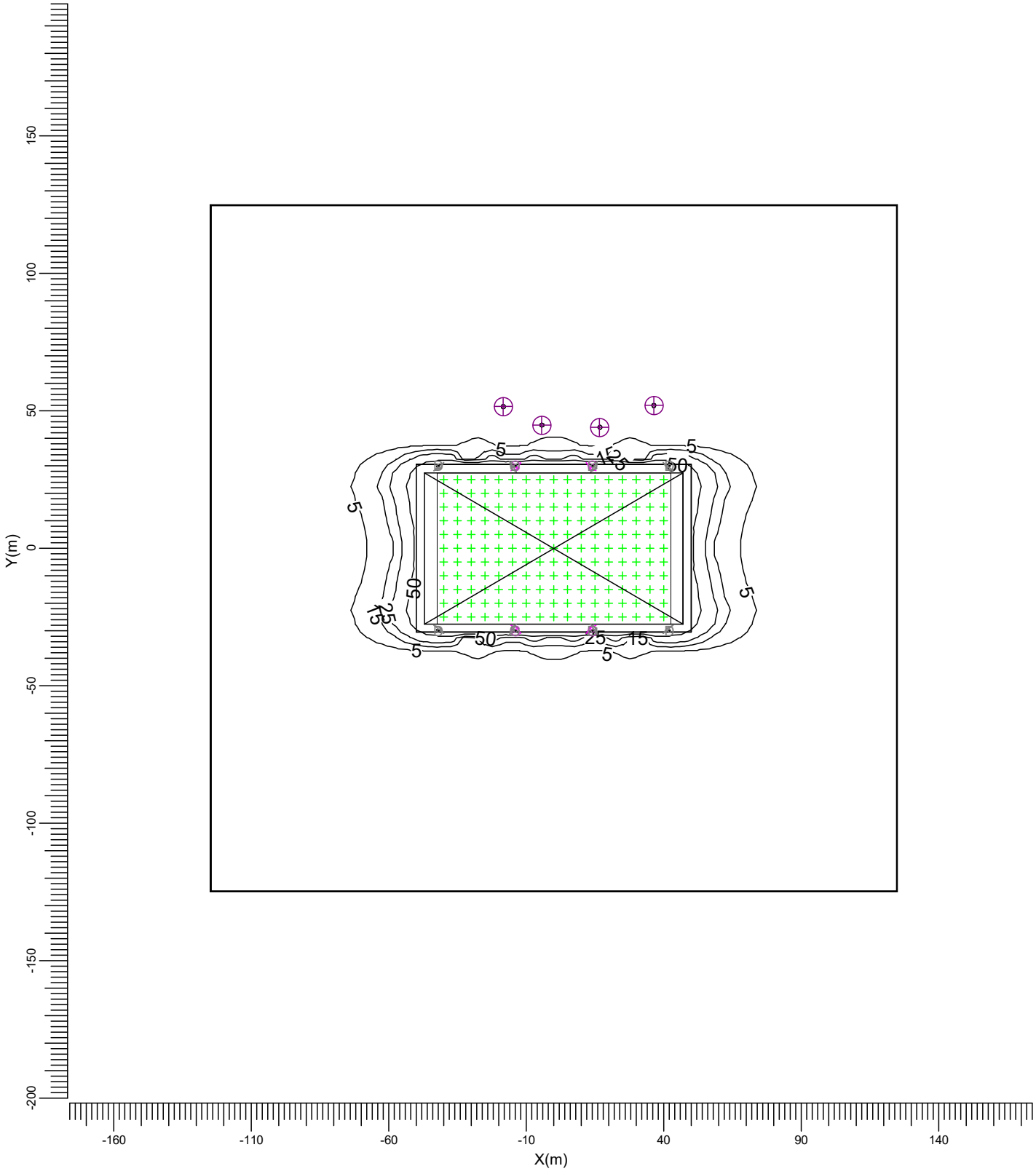
Obtrusive Light Calculations:

| Observer Code | Luminaire Code | Position | | | Aiming Angles | | | Maximum Intensity (cd) |
|---|---|---|---|---|---|---|---|---|
| | | X (m) | Y (m) | Z (m) | Rot. | Tilt90 | Tilt0 | |
| Aa | C | 14.00 | -30.00 | 15.00 | 126.35 | 5.00 | 0.00 | 3320 |
| Bb | C | -14.00 | -30.00 | 15.00 | 53.65 | 5.00 | -0.00 | 6863 |
| Cc | C | 14.00 | -30.00 | 15.00 | 126.35 | 5.00 | 0.00 | 4608 |
| Dd | D | 14.00 | -30.00 | 15.00 | 33.52 | 7.00 | 0.00 | 3068 |

# 3. Calculation Results

## 3.1 Spill: Iso Contour

Grid : Spill at Z = -0.00 m
Calculation : Surface Illuminance (lux)

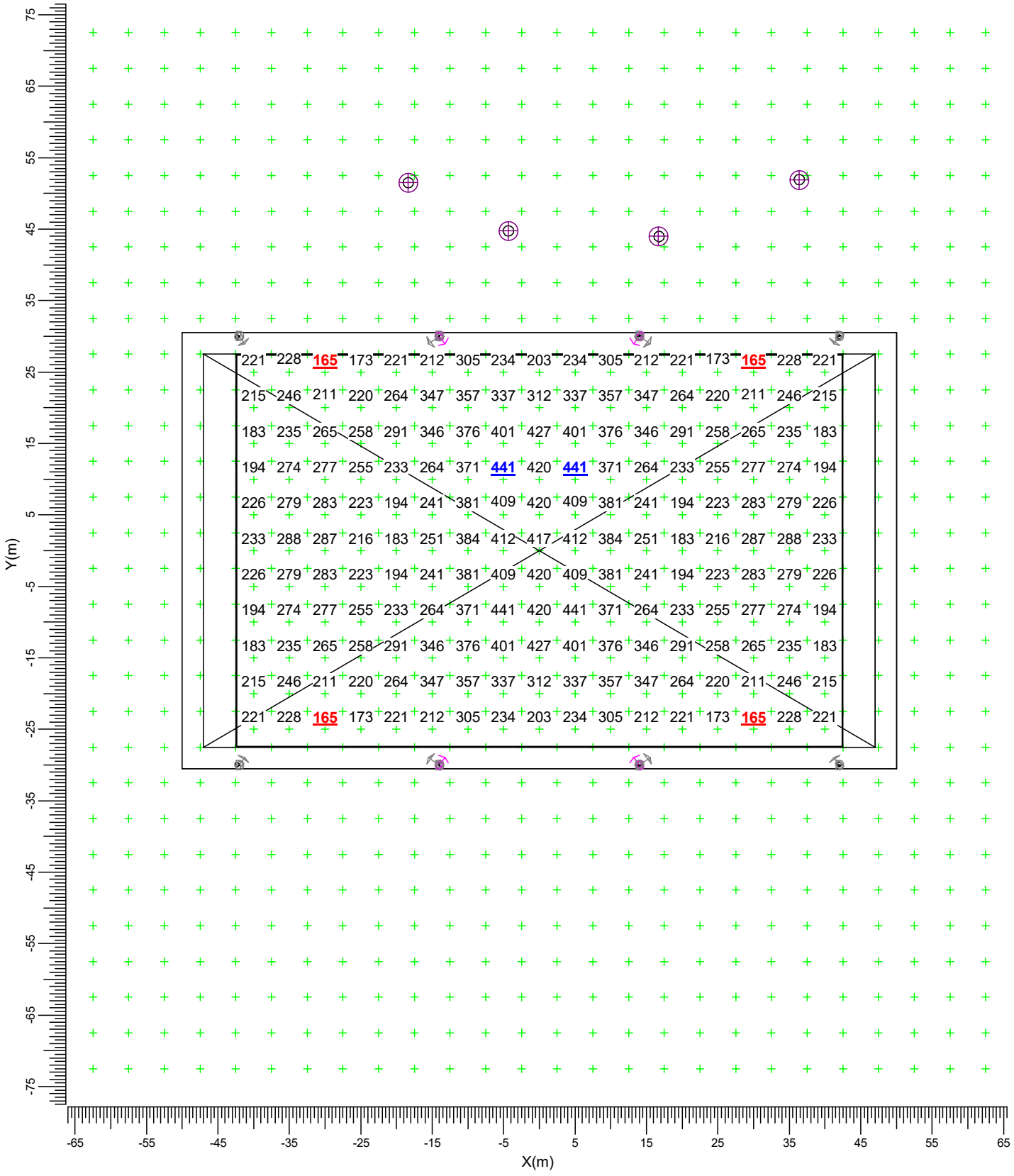



C → Floodlight FL 11 maxi pro, PL3 D → Floodlight FL 11 maxi pro, PL3

| Average | Min/Ave | Min/Max | Project maintenance factor | Scale |
|---|---|---|---|---|
| 24.9 | 0.00 | 0.00 | 1.00 | 1:2000 |

## 3.2 Lacrosse: Graphical Table

Grid : Lacrosse at Z = -0.00 m
Calculation : Surface Illuminance (lux)




C → Floodlight FL 11 maxi pro, PL3 D → Floodlight FL 11 maxi pro, PL3

| Average | Min/Ave | Min/Max | Project maintenance factor | Scale |
|---|---|---|---|---|
| 278 | 0.60 | 0.37 | 1.00 | 1:750 |

# 4. Luminaire Details

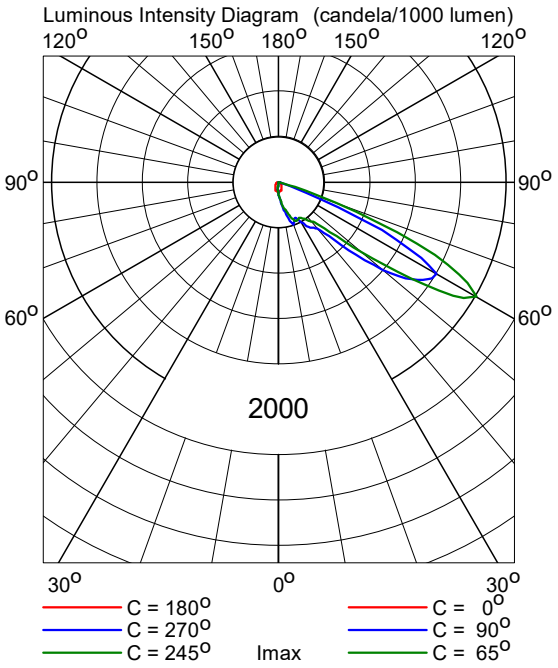
## 4.1 Project Luminaires

Floodlight FL 11 maxi pro, PL3 1xLichtstrom: 100 % | 3B BLC

Light output ratios
- DLOR : 1.00
- ULOR : 0.00
- TLOR : 1.00

Lamp flux : 175000 lm
Luminaire wattage : 1517.1 W
Measurement code : 59552_1810

Note: Luminaire data not from database.

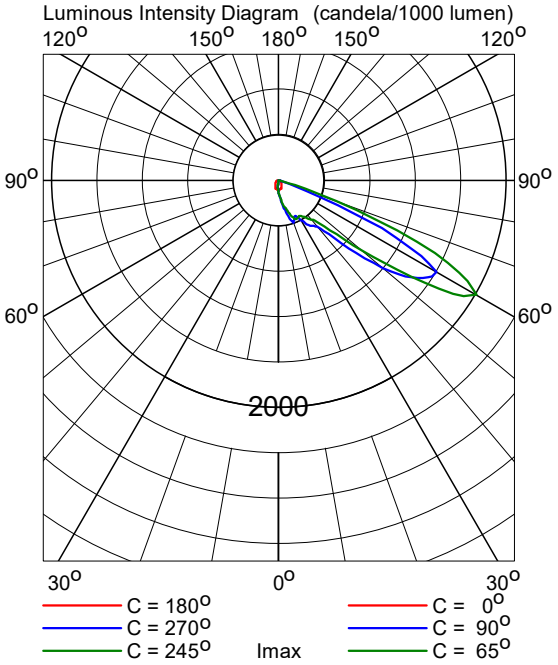



Floodlight FL 11 maxi pro, PL3 1xLichtstrom: 100 % | 2B BLC

Light output ratios
- DLOR : 1.00
- ULOR : 0.00
- TLOR : 1.00

Lamp flux : 117000 lm
Luminaire wattage : 1517.1 W
Measurement code : 59552_1810

Note: Luminaire data not from database.



# 5. Installation Data

## 5.1 Legends

Project Luminaires:

| Code | Qty | Luminaire Type | Lamp Type | Flux (lm) |
|---|---|---|---|---|
| C | 4 | Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI- | 1 * Lichtstrom: 100 % \| Dim-Lin: 2 | 1 * 175000 |
| D | 8 | Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI- | 1 * Lichtstrom: 100 % \| Dim-Lin: 2 | 1 * 117000 |

## 5.2 Luminaire Positioning and Orientation

| Qty and Code | Position | | | Aiming Angles | | |
|---|---|---|---|---|---|---|
| | X (m) | Y (m) | Z (m) | Rot. | Tilt90 | Tilt0 |
| 1 * D | -42.00 | -30.00 | 15.00 | 55.8 | 5.0 | -0.0 |
| 1 * D | -42.00 | 30.00 | 15.00 | -55.8 | 5.0 | 0.0 |
| 1 * C | -14.00 | -30.00 | 15.00 | 53.7 | 5.0 | -0.0 |
| 1 * D | -14.00 | -30.00 | 15.00 | 146.5 | 7.0 | -0.0 |
| 1 * C | -14.00 | 30.00 | 15.00 | -53.7 | 5.0 | 0.0 |
| 1 * D | -14.00 | 30.00 | 15.00 | -146.5 | 7.0 | 0.0 |
| 1 * C | 14.00 | -30.00 | 15.00 | 126.3 | 5.0 | 0.0 |
| 1 * D | 14.00 | -30.00 | 15.00 | 33.5 | 7.0 | 0.0 |
| 1 * C | 14.00 | 30.00 | 15.00 | -126.3 | 5.0 | -0.0 |
| 1 * D | 14.00 | 30.00 | 15.00 | -33.5 | 7.0 | -0.0 |
| 1 * D | 42.00 | -30.00 | 15.00 | 124.2 | 5.0 | 0.0 |
| 1 * D | 42.00 | 30.00 | 15.00 | -124.2 | 5.0 | -0.0 |