

Penydarren Boys and Girls FC

FOOTBALL LED - 300lux

Date: 08-04-2021

Designer: Andy Poplett

Description: Pitch 100m x 64m

The design has been completed using the Philips Asymmetric OptiVision LED GEN 3.5 Floodlights. A total of 16no have been used to achieve an average of 200lux.

Floodlights are mounted on 6 x 15 metre columns

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.

Signify

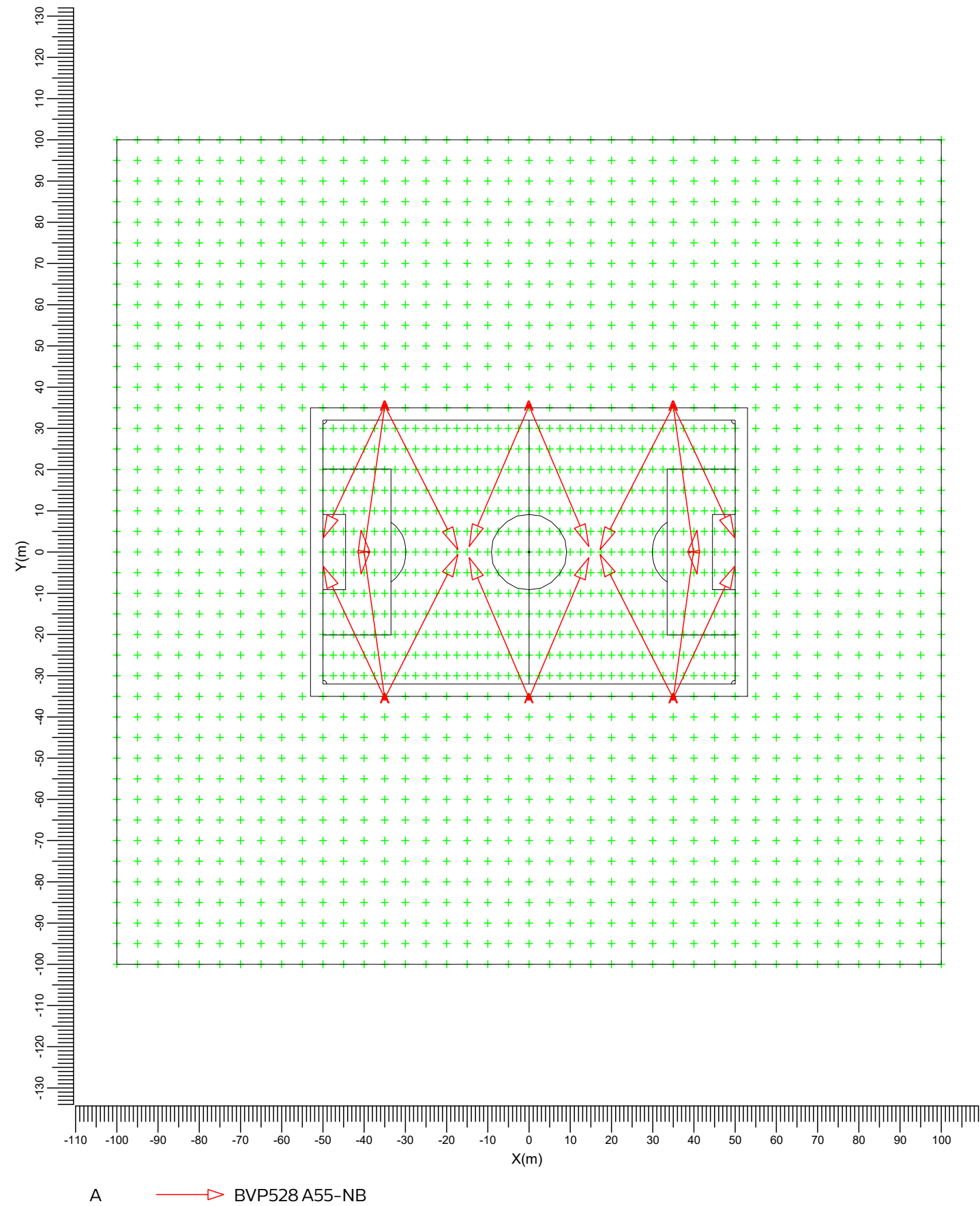
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1. Project Description

1.1 Top Project Overview



Scale
1:1250

2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	16	BVP528 A55-NB	1 * LED2220/757 OUT T15 50K	1500.0	1 * 222600

The total installed power: 24.00 (kWatt)

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code	Power (kWatt)
	A	
Point	4	6.00
Point1	12	18.00

2.2 Calculation Results

(Il)luminance Calculations:

Calculation	Type	Unit	Ave Min/AveMin/Max		
Football	Surface Illuminance	lux	304	0.72	0.45
Spillage	Surface Illuminance	lux	63.5	0.00	0.00

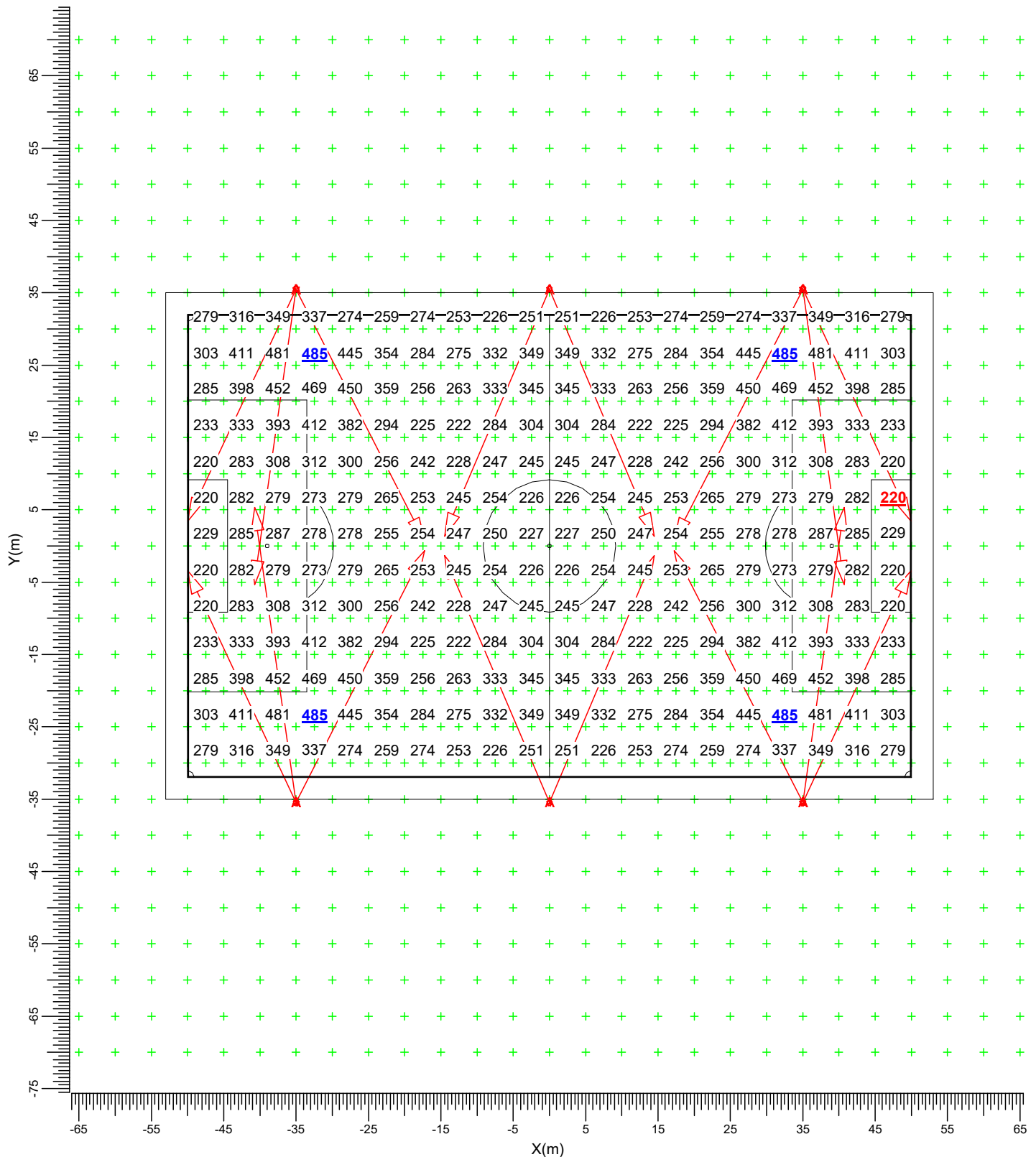
Obtrusive Light Calculations:

The upward light ratio (ULR) is 0.00.

3. Calculation Results

3.1 Football: Graphical Table

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



A BVP528 A55-NB

Average
304

Min/Ave
0.72

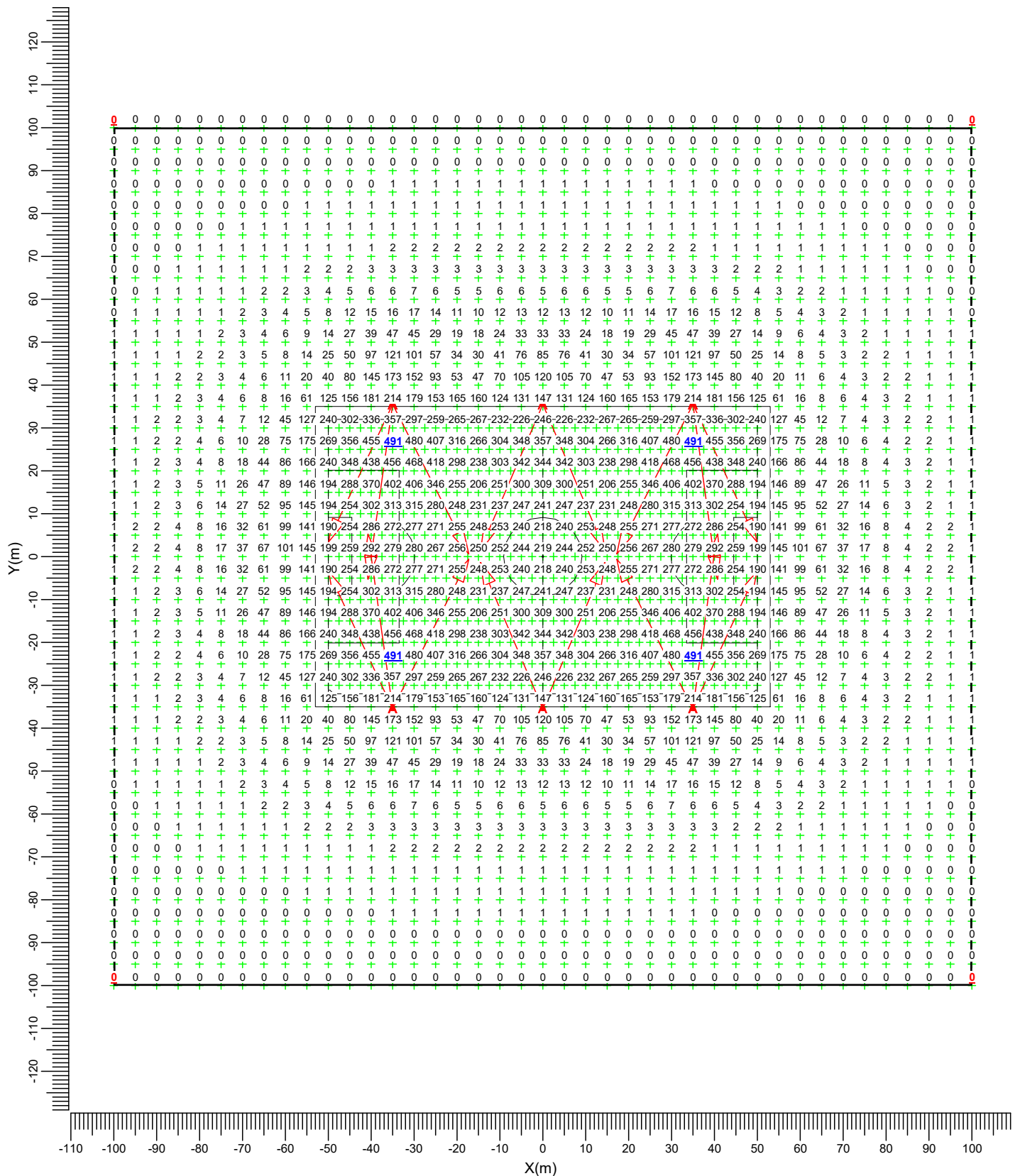
Min/Max
0.45

Project maintenance factor
0.90

Scale
1:750

3.2 Spillage: Graphical Table

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



A  BVP528 A55-NB

Average
63.5

Min/Ave
0.00

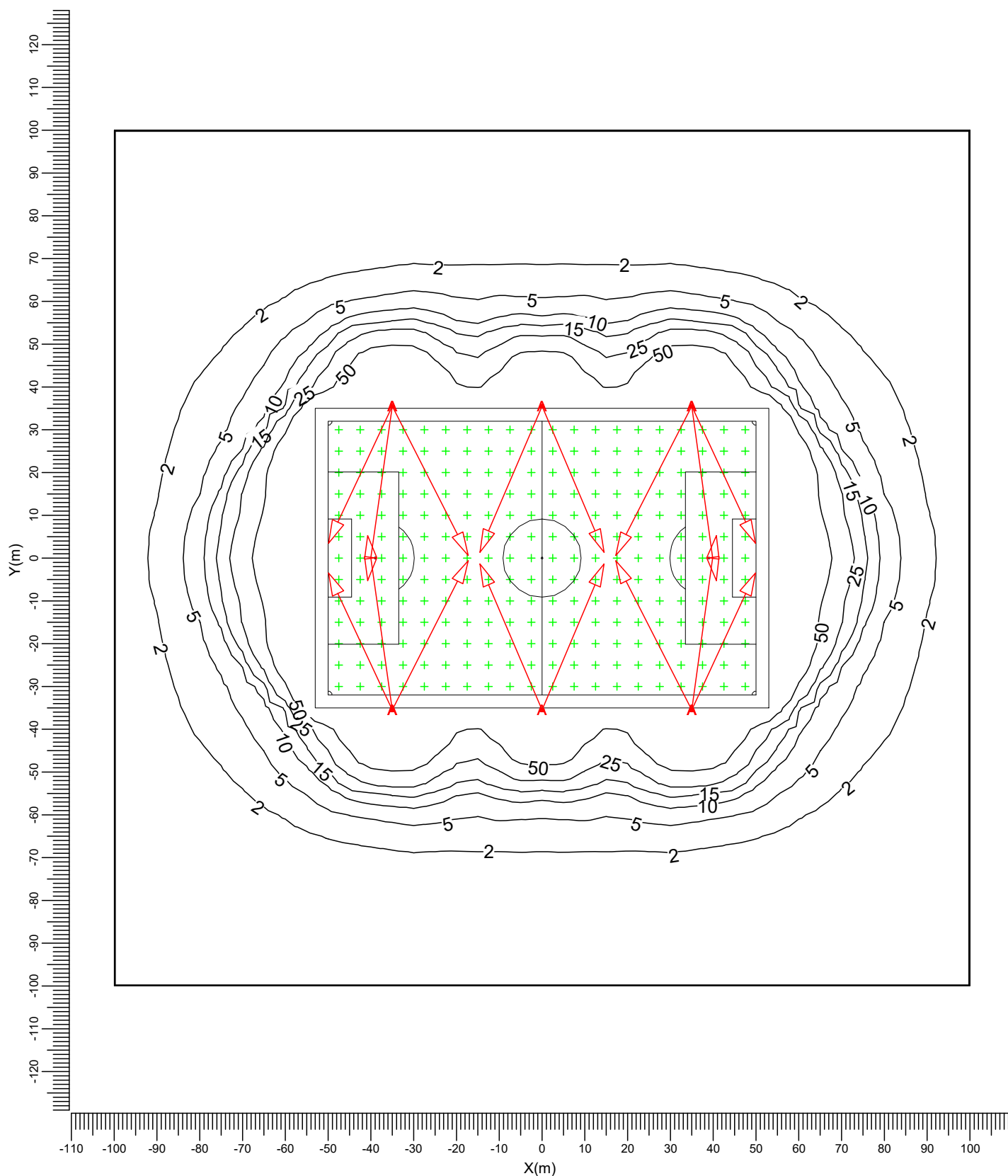
Min/Max
0.00

Project maintenance factor
0.90

Scale
1:1250

3.3 Spillage: Iso Contour

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



A  BVP528 A55-NB

Average
63.5

Min/Ave
0.00

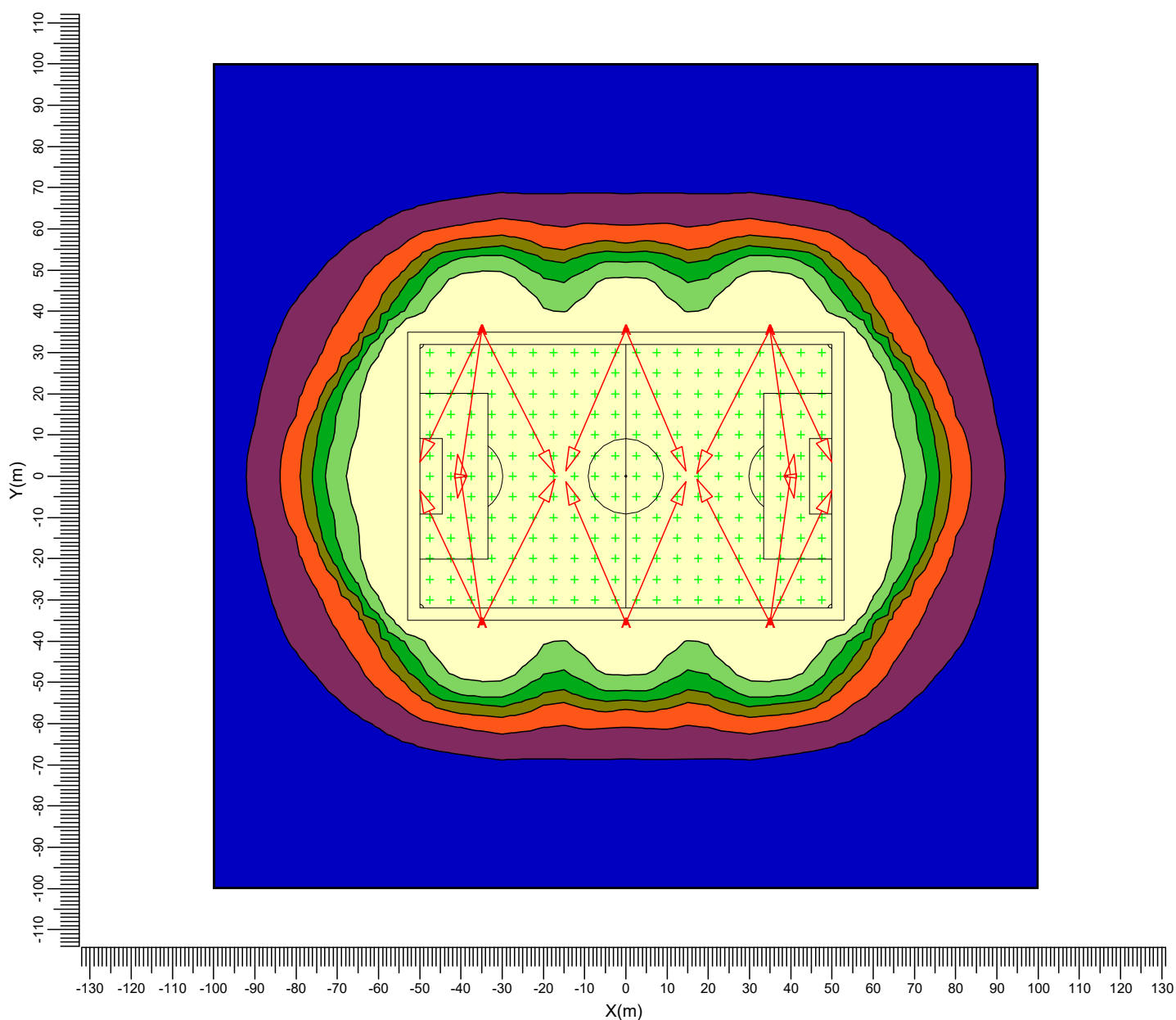
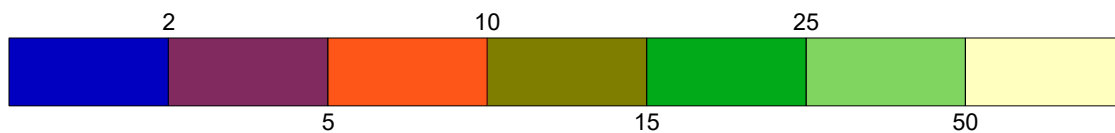
Min/Max
0.00

Project maintenance factor
0.90

Scale
1:1250

3.4 Spillage: Filled Iso Contour

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



A  BVP528 A55-NB

Average
63.5

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.90

Scale
1:1500

4. Luminaire Details

4.1 Project Luminaires

OptiVision LED

BVP528 1xLED2220/757 OUT T15 50K A55-NB

Light output ratios

DLOR : 0.84

ULOR : 0.00

TLOR : 0.84

Lamp flux : 222600 lm

Luminaire wattage : 1500.0 W

Measurement code : PRELIMA55N

Note: Luminaire data not from database.

