

Greyfriars Oxford Catholic School

3G Pitch - 200lux

Project code: 0400978034

Date: 11-03-2024

Designer: Andy Poplett

Description:

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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1. Project Description

1.1 Description

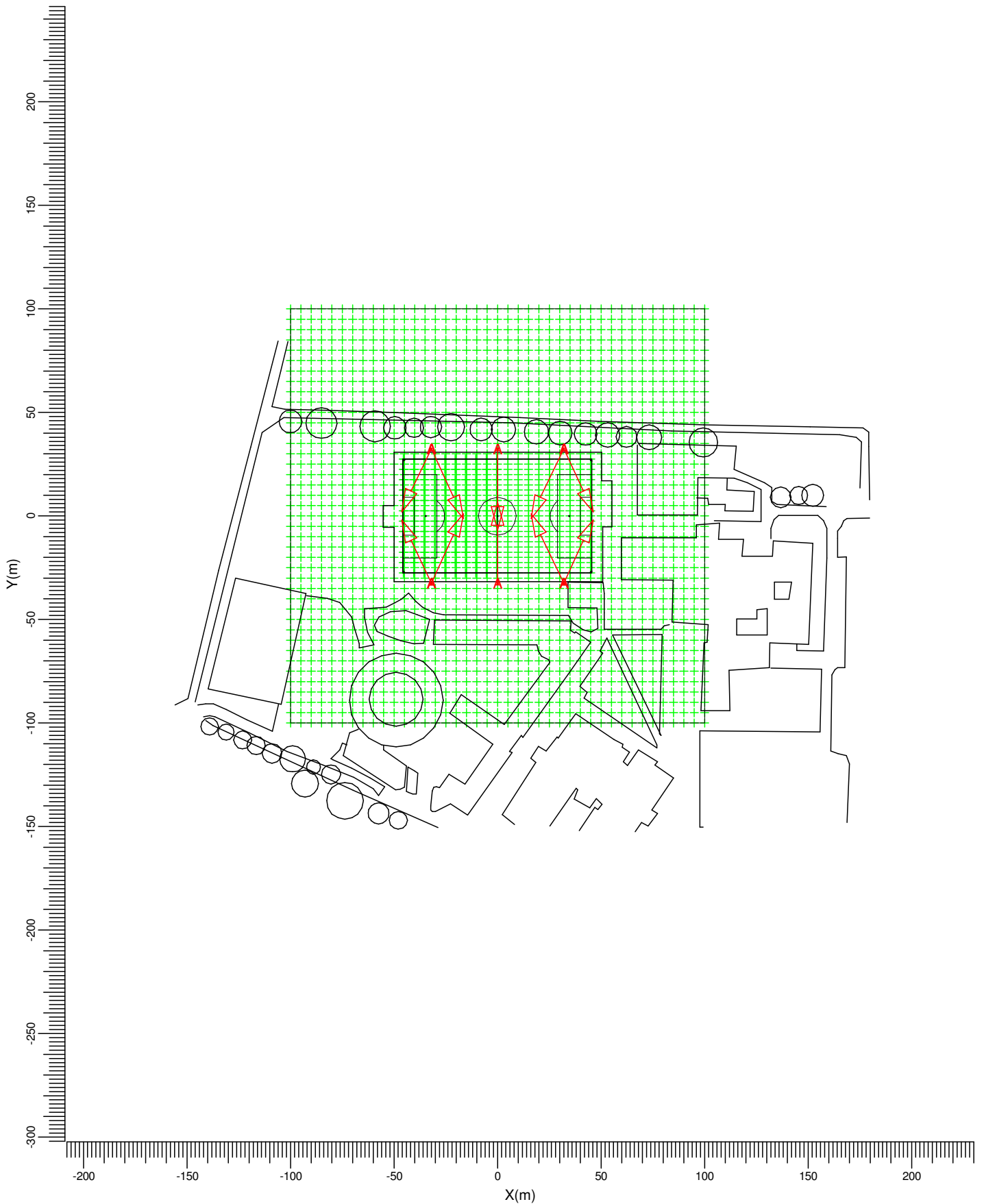
Maintenance Factor:- 0.90

Pitch 91m x 55m (+4 m run offs)

The design has been completed using the Philips Asymmetric OptiVision LED GEN 3.5 Floodlights. A total of 10no. have been used to achieve an average of 200lux.

Floodlights are mounted on 6 x 15 metre columns in existing locations

1.2 Top Project Overview



A  BVP528 OUT T35 A55-NB

Scale
1:2500

2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	10	BVP528 OUT T35 A55-NB	1 * LED2590-4S/757	1505.9	1 * 259000

The total installed power: 15.06 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code	Power (kWatt)
	A	
Main Pitch	10	15.06
Half Pitch	6	9.04

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code	Power (kWatt)
	A	
Point1	4	6.02
Point2	0	0.00
Point3	2	3.01
Point4	4	6.02

2.2 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	Main Pitch	0.90
2	Half Pitch	0.90

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
Football	1	Surface Illuminance	lux	243	0.66	0.40
Half Pitch	2	Surface Illuminance	lux	235	0.65	0.39
Spillage	1	Surface Illuminance	lux	44.9	0.00	0.00

Obtrusive Light Calculations:

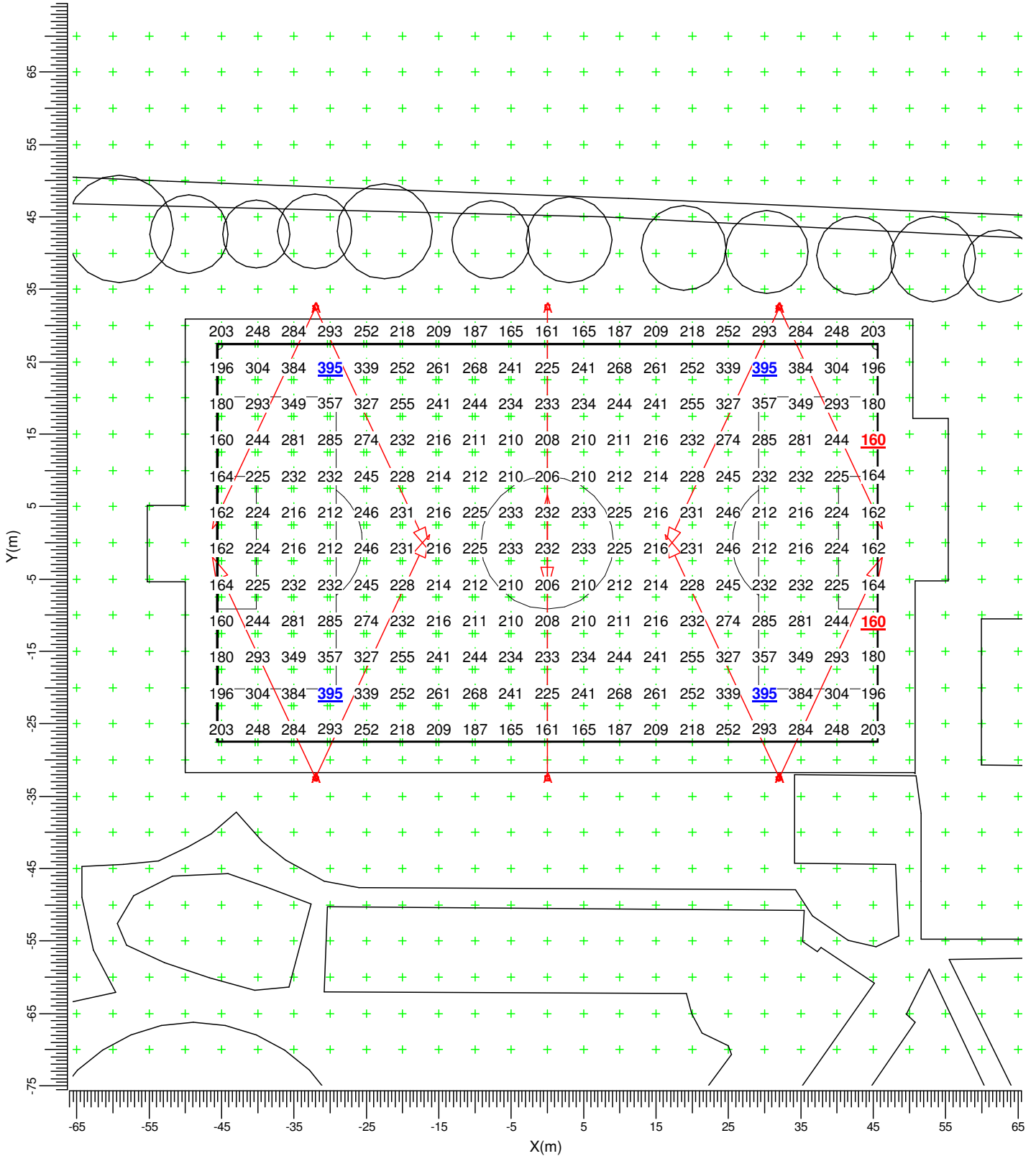
Switching Mode	ULR
1	0.00
2	0.00

3. Calculation Results

3.1 Football: Graphical Table

Main Pitch

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



A BVP528 OUT T35 A55-NB

Average
243

Min/Ave
0.66

Min/Max
0.40

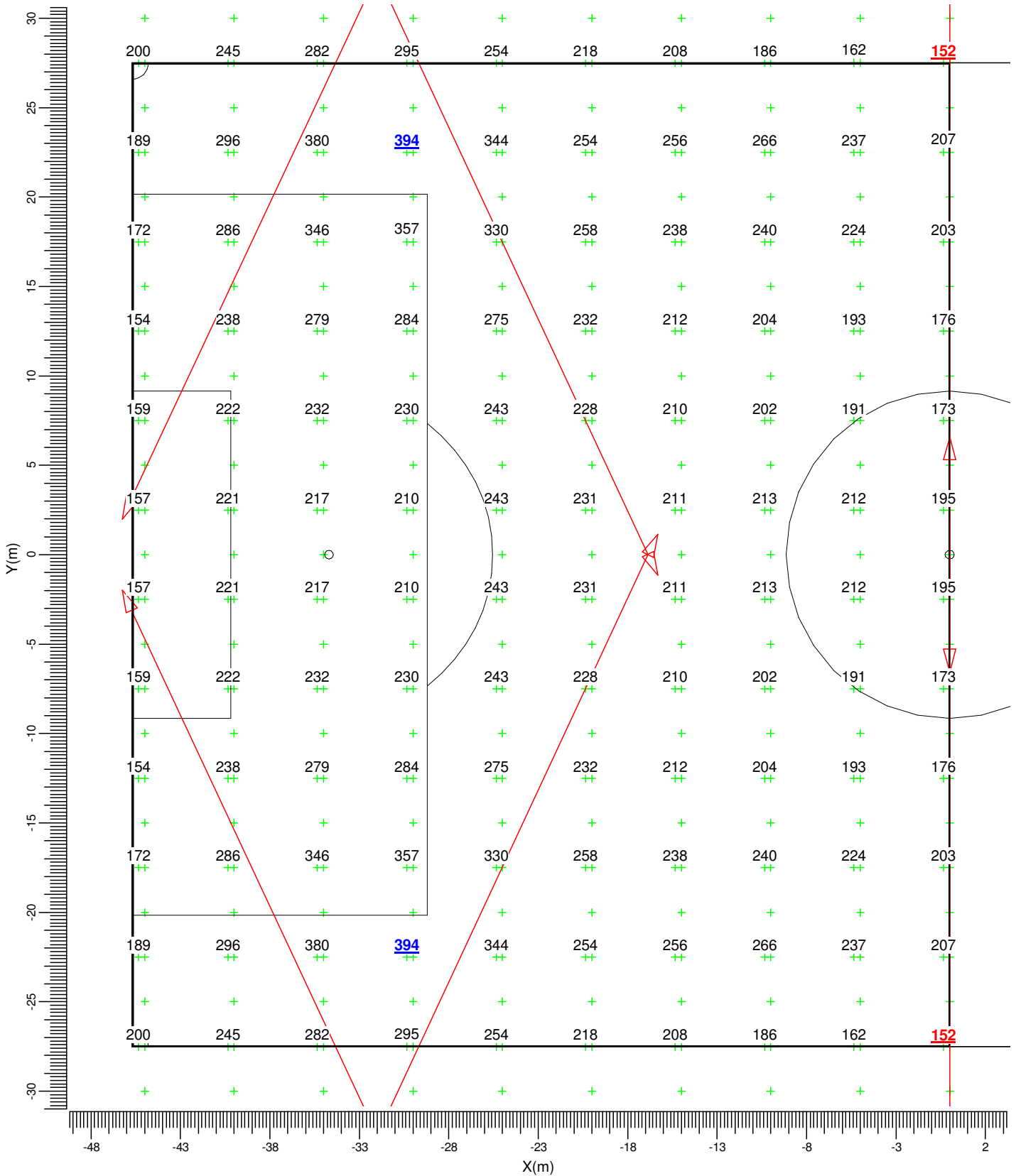
Project maintenance factor
0.90

Scale
1:750

3.2 Half Pitch: Graphical Table

Half Pitch

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



A BVP528 OUT T35 A55-NB

Average
235

Min/Ave
0.65

Min/Max
0.39

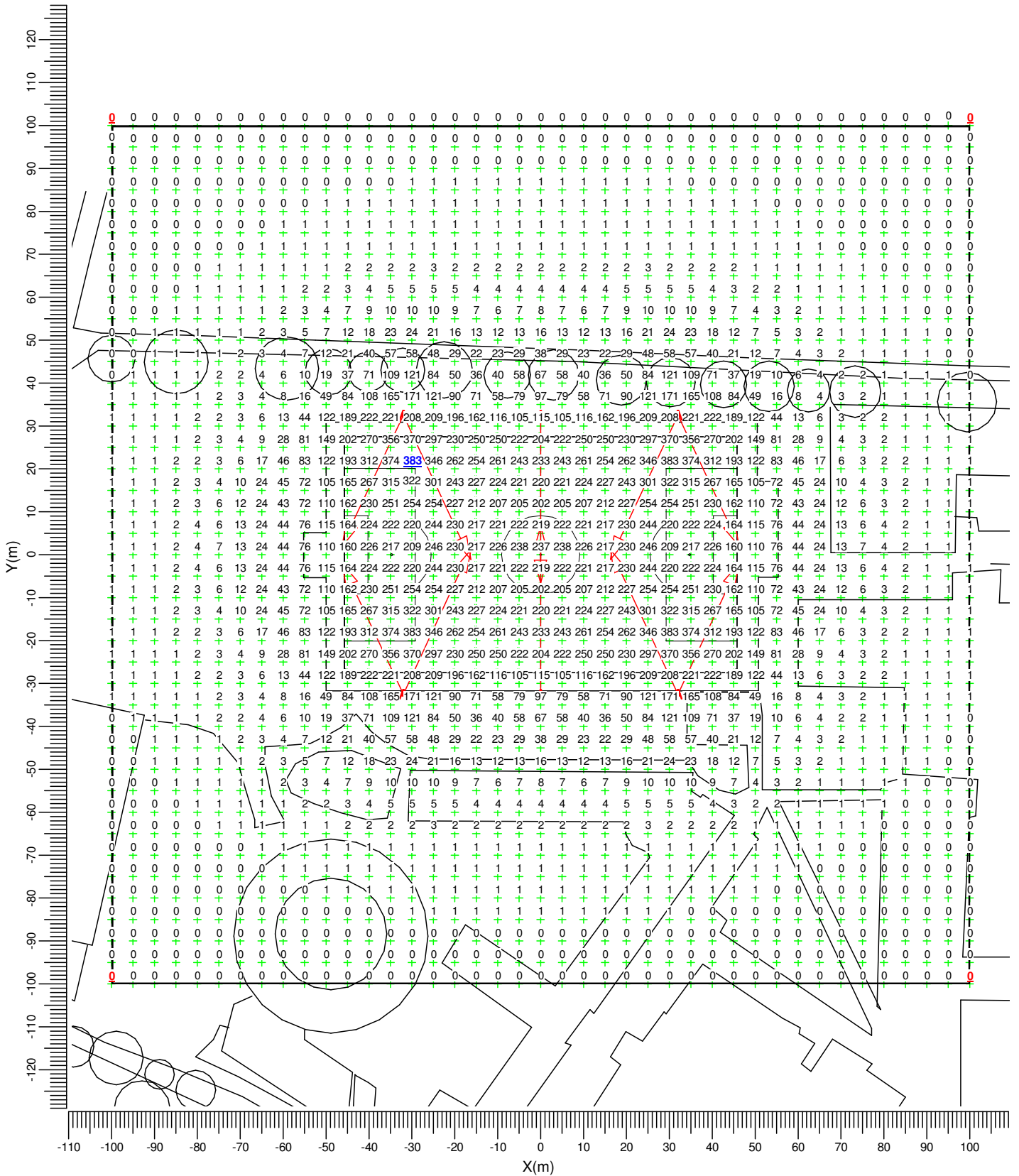
Project maintenance factor
0.90

Scale
1:300

3.3 Spillage: Graphical Table

Main Pitch

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



A BVP528 OUT T35 A55-NB

Average
44.9

Min/Ave
0.00

Min/Max
0.00

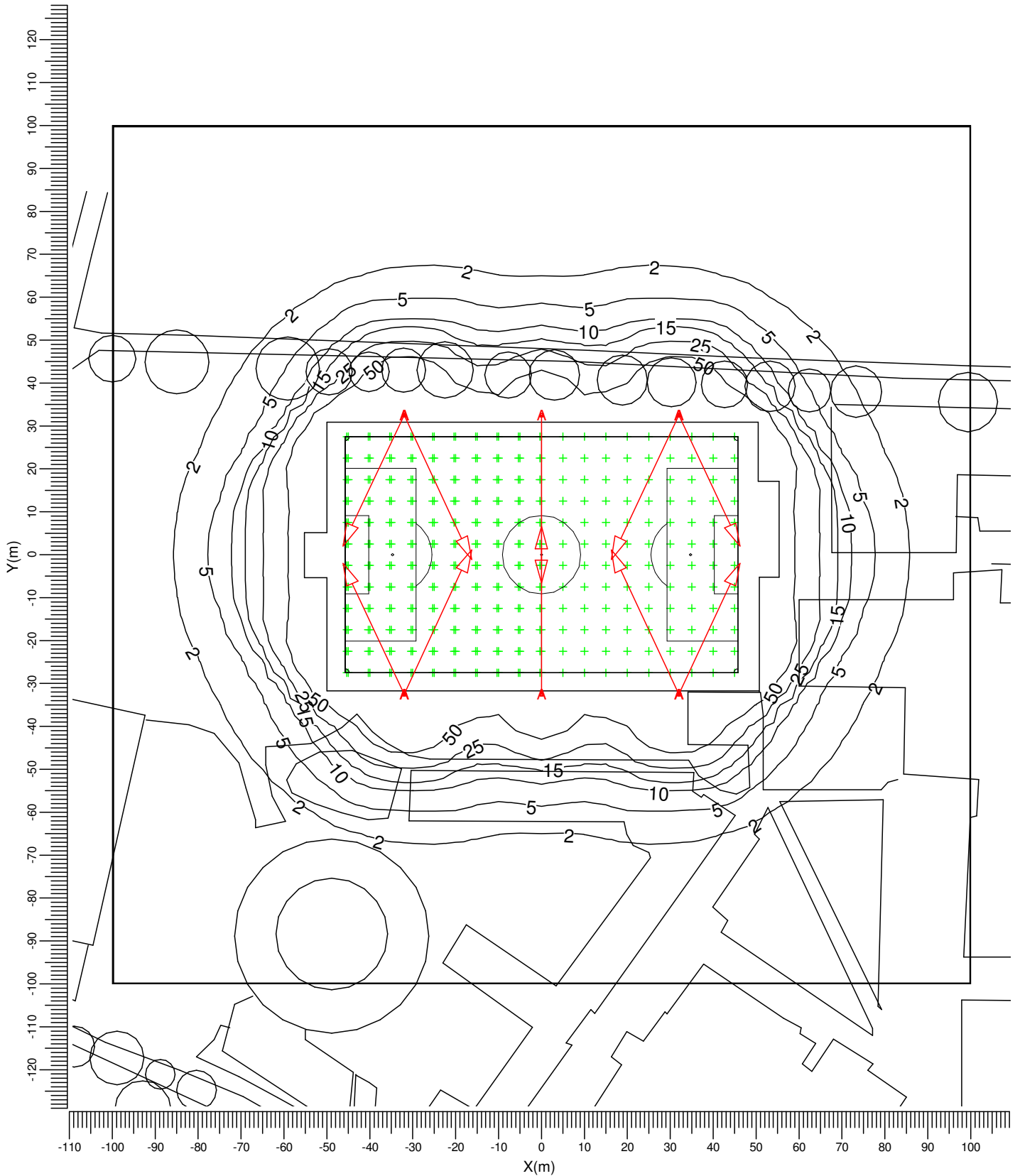
Project maintenance factor
0.90

Scale
1:1250

3.4 Spillage: Iso Contour

Main Pitch

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



A  BVP528 OUT T35 A55-NB

Average
44.9

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.90

Scale
1:1250

4. Luminaire Details

4.1 Project Luminaires

OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A55-NB

Light output ratios

DLOR	: 0.82
ULOR	: 0.00
TLOR	: 0.82
Ballast	: E3/D4I
Lamp flux	: 259000 lm
Luminaire wattage	: 1505.9 W
Measurement code	: LVA2111038

Note: Luminaire data not from database.

