

Vaughan Park Resolven

FOOTBALL LED - 200lux

Date: 20-05-2025

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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Table of Contents

1.	Project Description	3
1.1	Description	3
1.2	Top Project Overview	4
2.	Summary	5
2.1	Obstacle Information	5
2.2	Project Luminaires	5
2.3	Calculation Results	5
3.	Calculation Results	6
3.1	Pitch 46 m x 46 m: Graphical Table	6
3.2	Spillage: Graphical Table	7
3.3	Spillage: Iso Contour	8
3.4	Spillage: Filled Iso Contour	9
4.	Luminaire Details	10
4.1	Project Luminaires	10

1. Project Description

1.1 Description

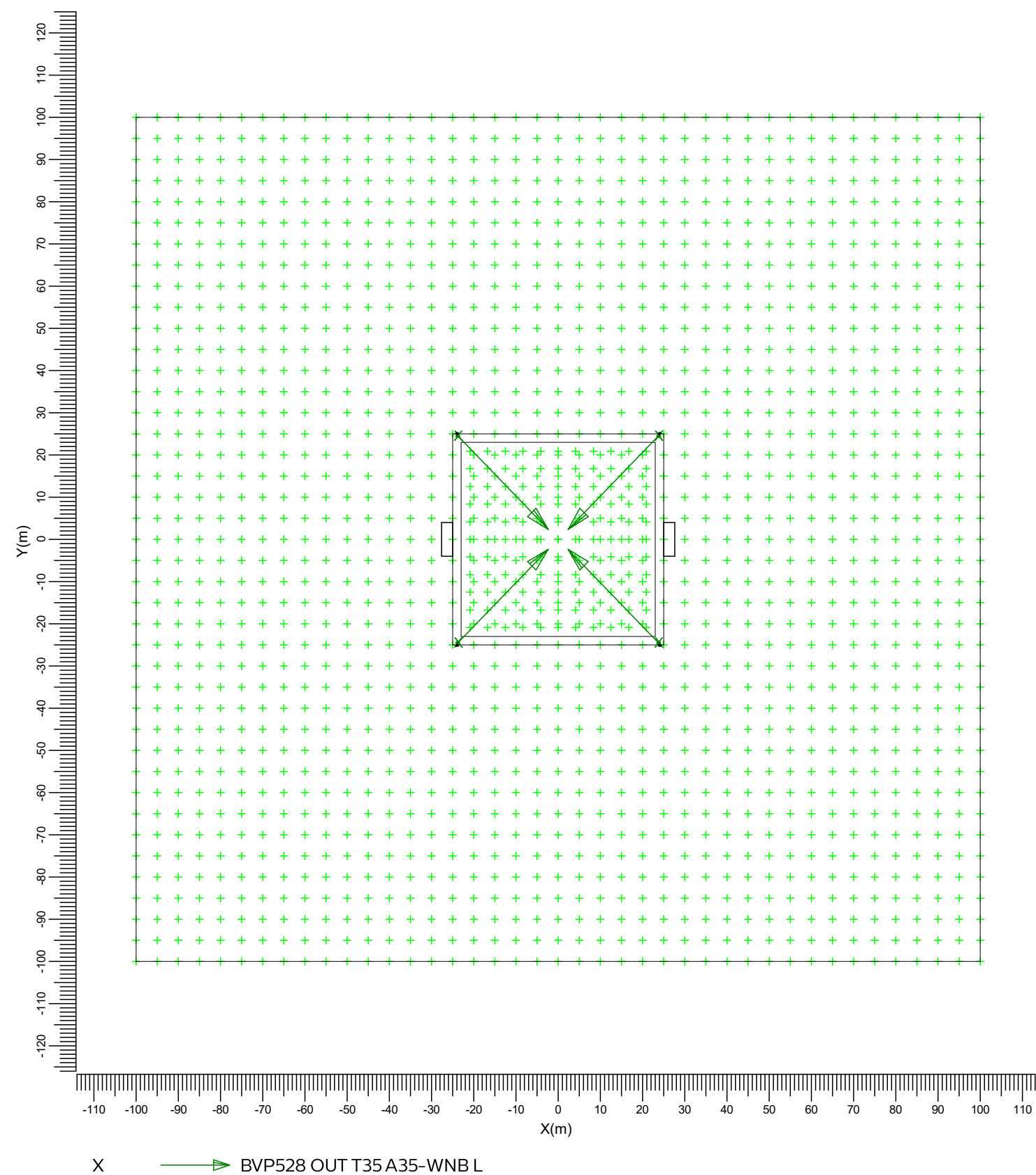
Maintenance Factor:- 0.95

Pitch 46m x 46m (fence area 50 x 50m)

The design has been completed using the Philips Asymmetric OptiVision LED GEN 3.5 Floodlights. A total of 4no have been used to achieve an average of 175lux.

Floodlights are mounted on 4 x 10 metre columns

1.2 Top Project Overview



Scale
1:1250

2. Summary

2.1 Obstacle Information

Obstacle	Transparency (%)	Position		
		X (m)	Y (m)	Z (m)
Pillar	0	-24.00	-25.10	0.00
		24.00	-25.10	0.00
		-24.00	25.10	0.00
		24.00	25.10	0.00

2.2 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
X	4	BVP528 OUT T35 A35-WNB LO	1 * LED2590-4S/740	1505.9	1 * 259000

The total installed power: 6.02 (kWatt)

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code	Power (kWatt)
	X	
Corner 2	4	6.02

2.3 Calculation Results

(Il)luminance Calculations:

Calculation	Type	Unit	Ave Min/AveMin/Max		
Pitch 46 m x 46 m	Surface Illuminance	lux	201	0.64	0.46
Spillage	Surface Illuminance	lux	15.6	0.00	0.00

Obtrusive Light Calculations:

The upward light ratio (ULR) is 0.00.

3. Calculation Results

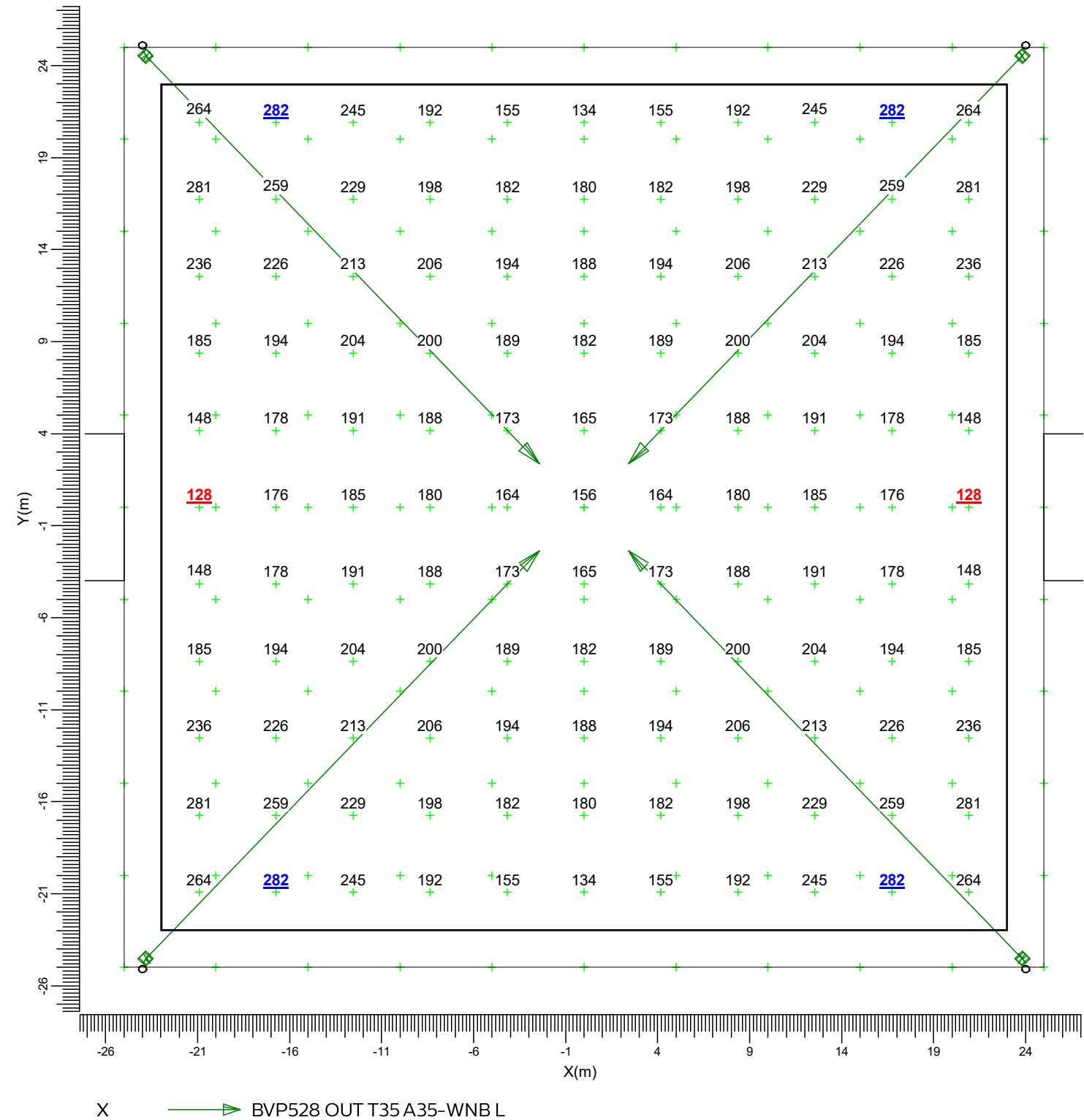
3.1 Pitch 46 m x 46 m: Graphical Table

Grid

: Pitch 46 m x 46 m at Z = -0.00 m

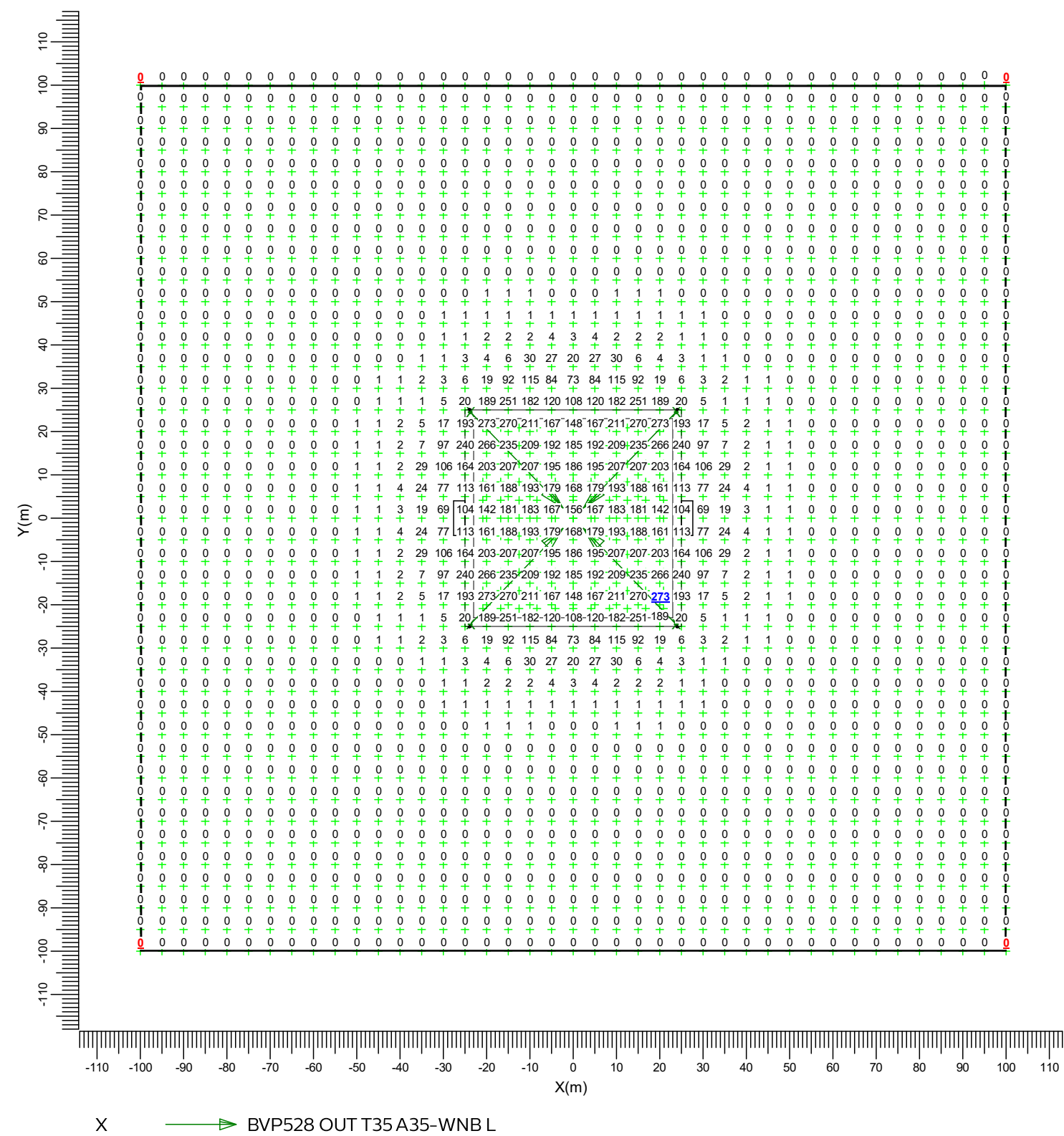
Calculation

: Surface Illuminance (lux)



3.2 Spillage: Graphical Table

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



X

—▶ BVP528 OUT T35 A35-WNB L

Average
15.6

Min/Ave
0.00

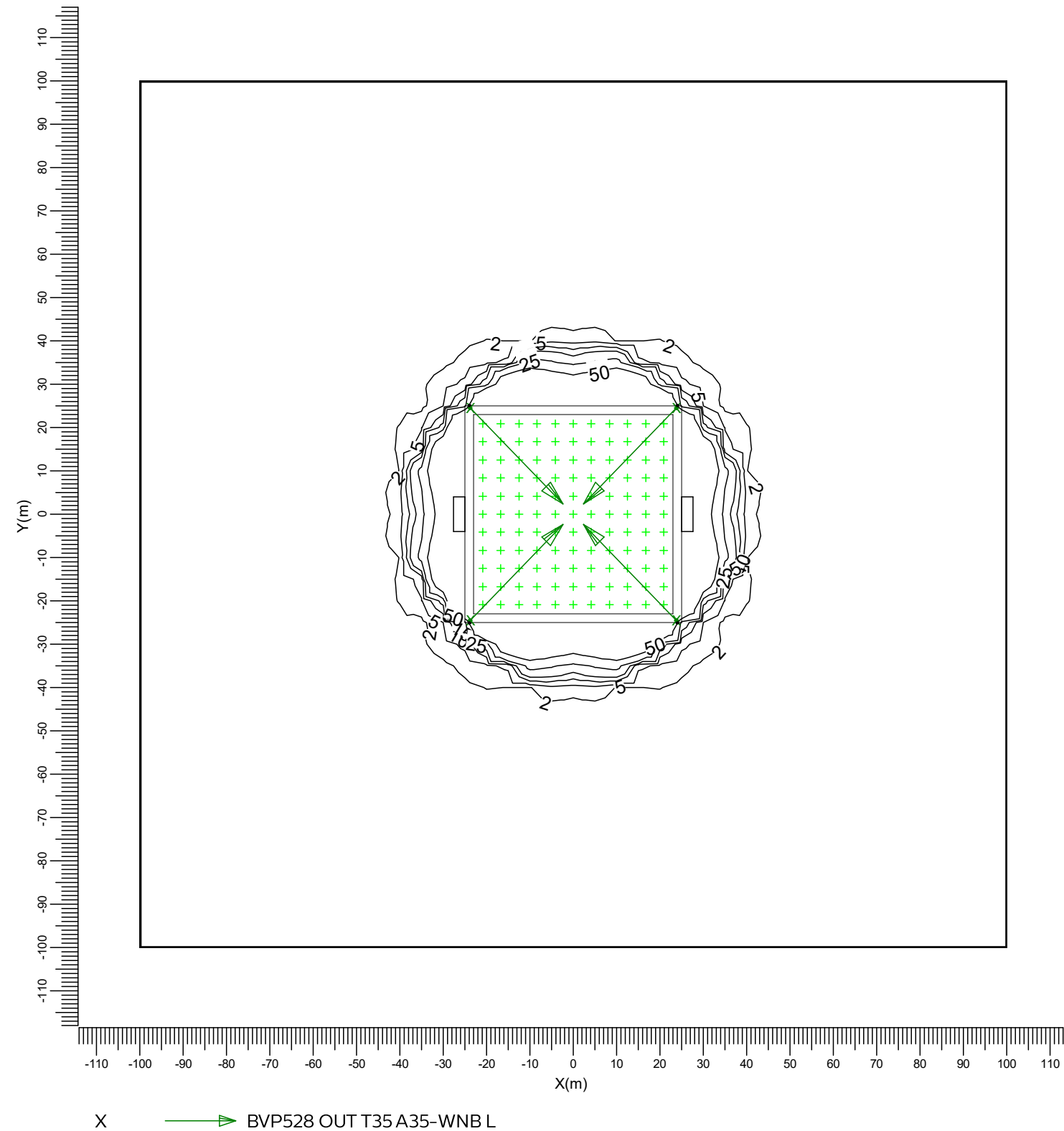
Min/Max
0.00

Project maintenance factor
0.95

Scale
1:1250

3.3 Spillage: Iso Contour

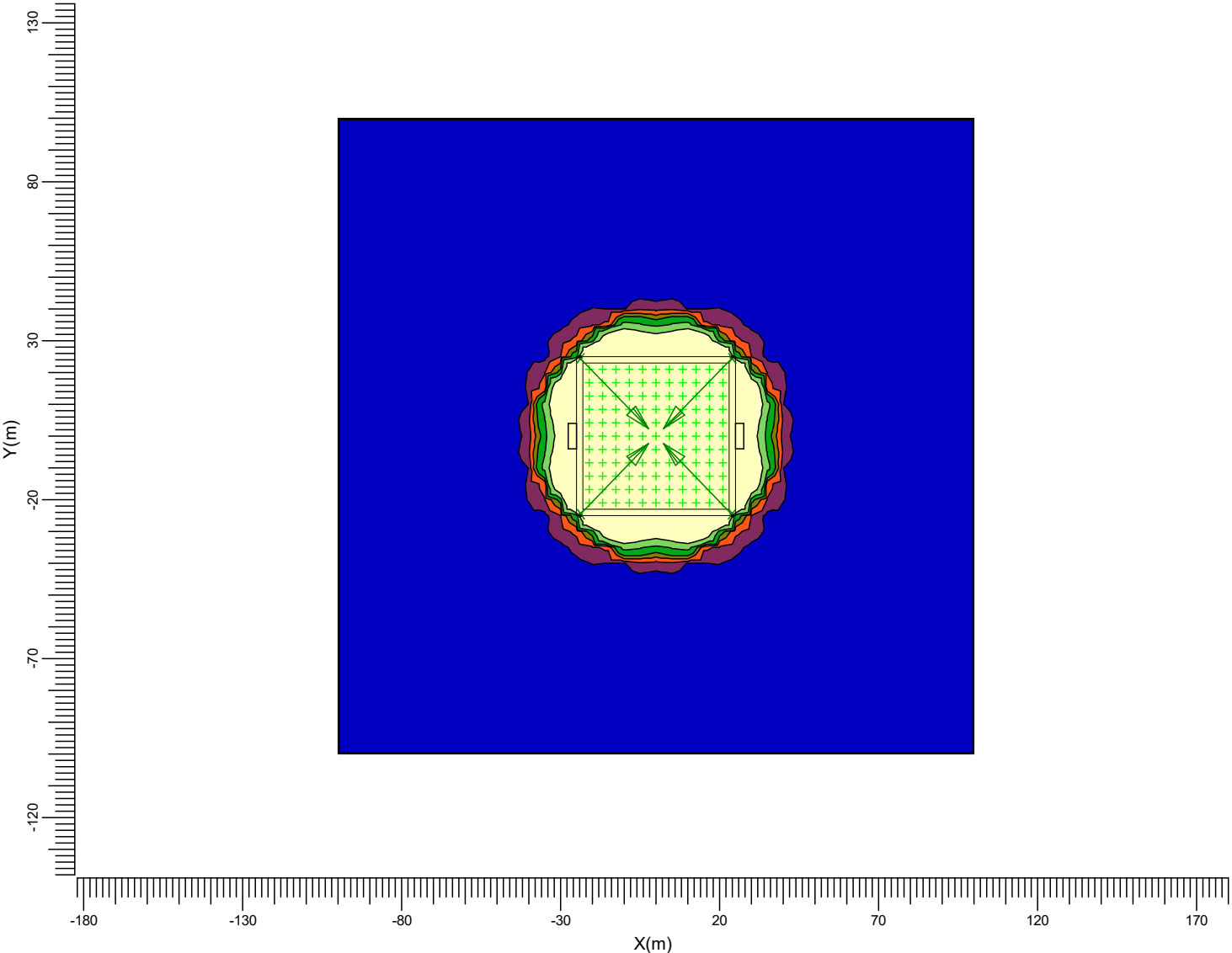
Grid : Spillage at Z = -0.00 m
Calculation : Surface Illuminance (lux)



Average	Min/Ave	Min/Max	Project maintenance factor	Scale
15.6	0.00	0.00	0.95	1:1250

3.4 Spillage: Filled Iso Contour

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



X  BVP528 OUT T35 A35-WNB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
15.6	0.00	0.00	0.95	1:2000

4. Luminaire Details

4.1 Project Luminaires

OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/740/740 E3/D4I A35-WNB LO

Light output ratios
DLOR : 0.67
ULOR : 0.00
TLOR : 0.67
Ballast : E3/D4I
Lamp flux : 259000 lm
Luminaire wattage : 1505.9 W
Measurement code : LVM2K49200

Note: Luminaire data not from database.

