Edisford Playing Pitches

3G Pitch

Date: 13-07-2026

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 (Fenced Area 97m x 61m)

The design has been completed using the Philips Asymmetric OptiVision LED GEN 3.5 A35 Floodlights. A total of 12 no have been used to achieve an average of 200lux.

Floodlights are mounted on 6 x 15 metre columns

All Floodlights fitted with integral LO (maximum cut off) louvres to reduce spill and glare.

1.2 Top Project Overview

N → BVP528 OUT T35 A35-NB LO O → BVP528 OUT T35 A35-NMB L

Scale
1:1250

2. Summary

2.1 Observer Information

Code	Observer	Position		
		X (m)	Y (m)	Z (m)
Aa	49 Blakewater Rd	-44.70	-105.20	1.50
Bb	51 Blakewater Rd	-50.70	-93.90	1.50
Cc	53 Blakewater Rd	-54.60	-86.90	1.50
Dd	55 Blakewater Rd	-60.30	-76.60	1.50
Ee	57 Blakewater Rd	-64.90	-67.30	1.50
Ff	59 Blakewater Rd	-69.20	-59.40	1.50
Gg	61 Blakewater Rd	-72.90	-51.10	1.50
Hh	63 Blakewater Rd	-78.90	-40.80	1.50
Ii	42 Ribble Prospect	-82.40	-24.90	1.50

2.2 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
N	8	BVP528 OUT T35 A35-NB LO	1 * LED2590-4S/757	1505.9	1 * 259000
O	4	BVP528 OUT T35 A35-NMB LO	1 * LED2590-4S/757	1505.9	1 * 259000

The total installed power: 18.07 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code		Power (kWatt)
	N	O	
Main Pitch	8	4	18.07
Half Pitch	4	2	9.04
All ON	8	4	18.07

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code		Power (kWatt)
	N	O	
Centre 1	0	2	3.01
Centre 2	0	2	3.01
Corner 1	4	0	6.02
Corner 2	4	0	6.02

2.3 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	Main Pitch	0.90
2	Half Pitch	0.90
3	All ON	1.00

(Il)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave	Max	Min/Ave	Min/Max
Football	1	Surface Illuminance	lux	233		0.69	0.51
Half Pitch	2	Surface Illuminance	lux	209		0.61	0.42
Spillage	3	Surface Illuminance	lux	43.1		0.00	0.00
Ev Grid 1	3	Surface Illuminance	lux		0.23		
Ev Grid 2	3	Surface Illuminance	lux		0.07		

Obtrusive Light Calculations:

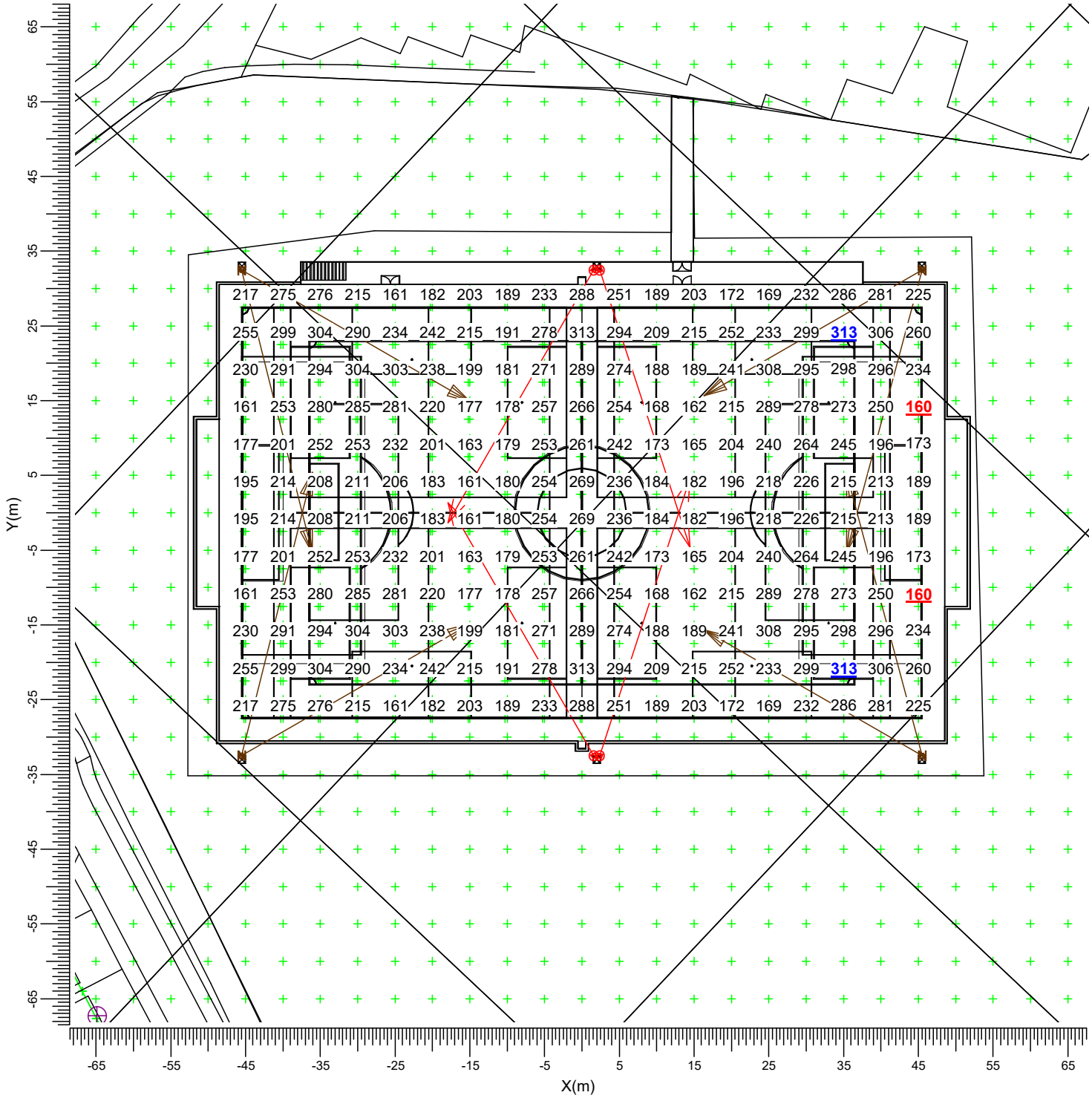
Switching Mode	Observer Code	Luminaire Code	Position			Aiming Angles			Maximum Intensity (cd)
			X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	
1	Aa	O	1.60	32.50	15.00	-120.00	69.00	-0.00	888
1	Bb	O	1.60	32.50	15.00	-120.00	69.00	-0.00	878
1	Cc	O	1.60	32.50	15.00	-120.00	69.00	-0.00	904
1	Dd	O	1.60	32.50	15.00	-120.00	69.00	-0.00	915
1	Ee	O	1.60	32.50	15.00	-120.00	69.00	-0.00	940
1	Ff	O	1.60	32.50	15.00	-120.00	69.00	-0.00	927
1	Gg	O	1.60	32.50	15.00	-120.00	69.00	-0.00	965
1	Hh	O	1.60	32.50	15.00	-120.00	69.00	-0.00	955
1	Ii	O	1.60	32.50	15.00	-120.00	69.00	-0.00	1137

Switching Mode	ULR
1	0.00
2	0.00
3	0.00

3. Calculation Results

3.1 Football: Graphical Table — Main Pitch

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



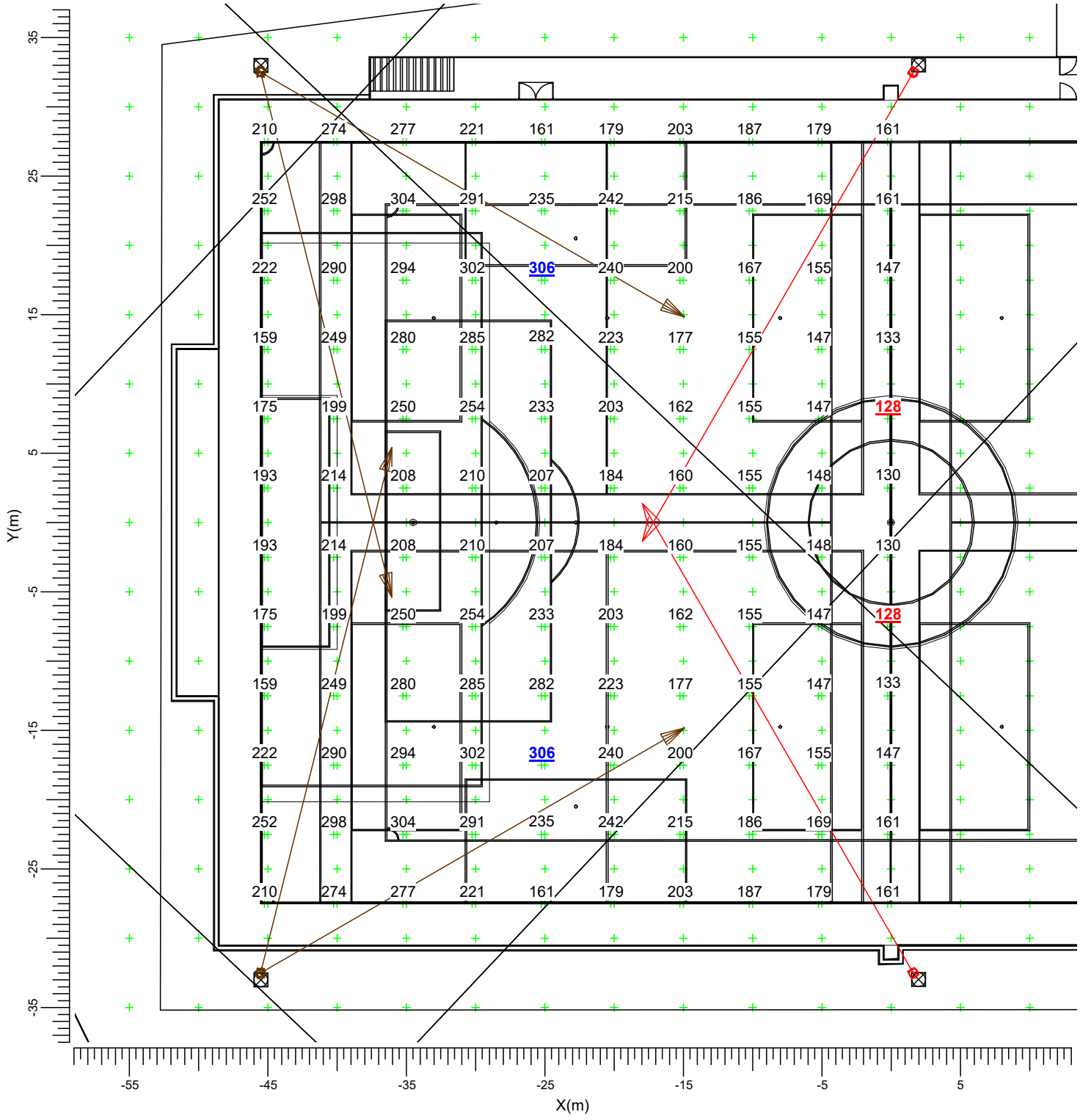
N → BVP528 OUT T35 A35-NB LO O → BVP528 OUT T35 A35-NMB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
233	0.69	0.51	0.90	1:750

3.2 Half Pitch: Graphical Table

Half Pitch

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



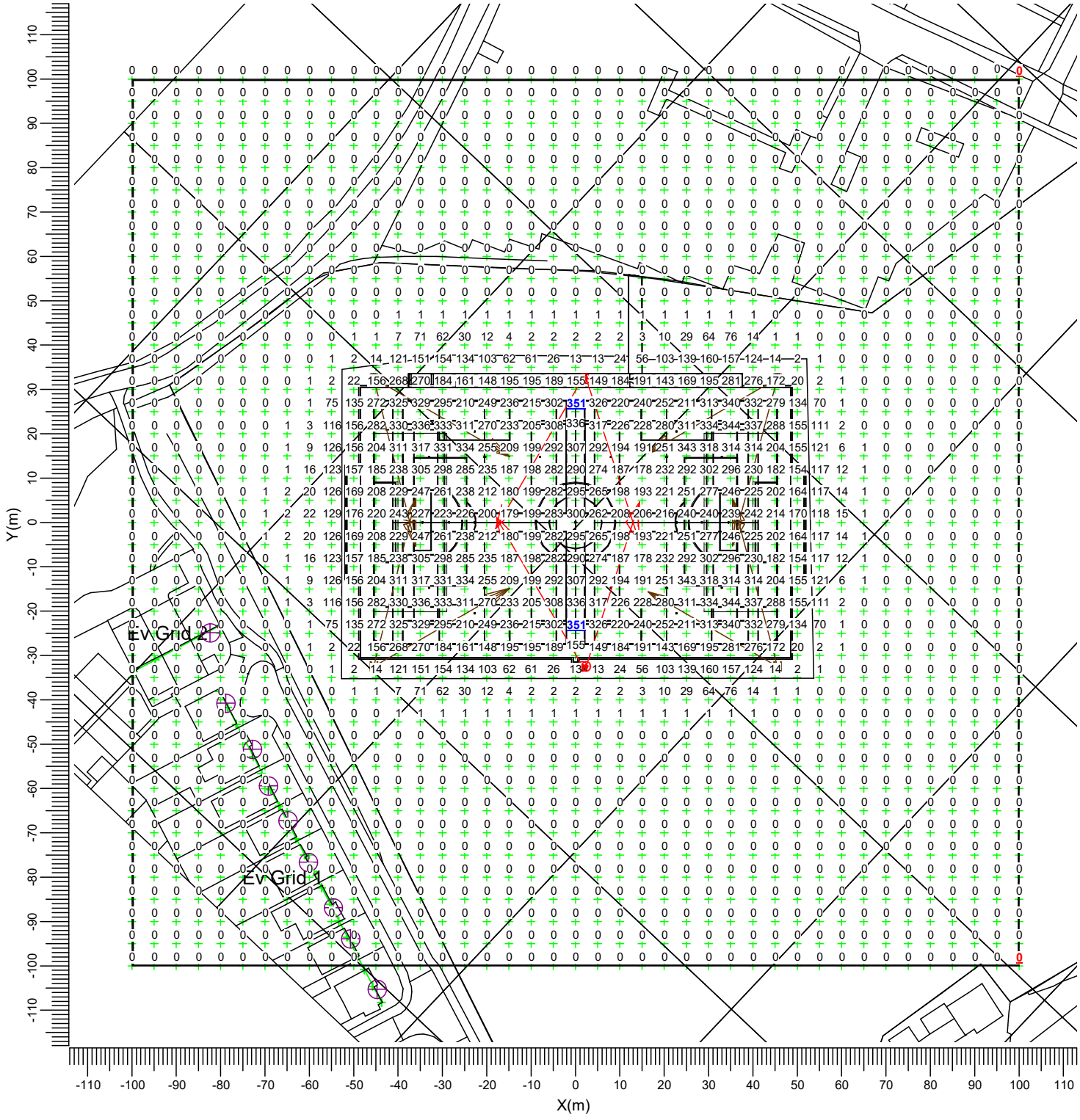
N → BVP528 OUT T35 A35-NB LO O → BVP528 OUT T35 A35-NMB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
209	0.61	0.42	0.90	1:400

3.3 Spillage: Graphical Table

All ON

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



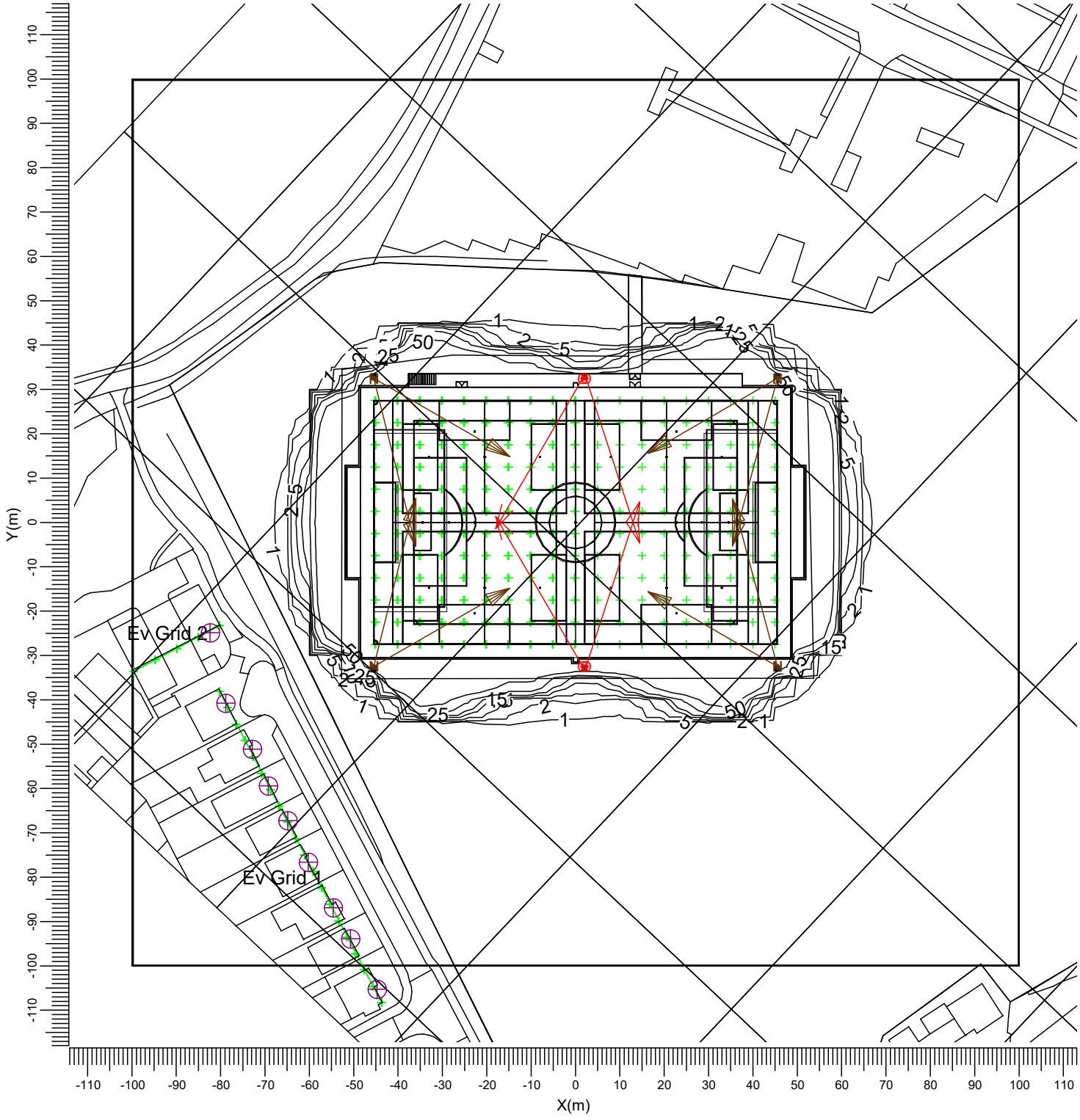
N → BVP528 OUT T35 A35-NB LO
O → BVP528 OUT T35 A35-NMB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
43.1	0.00	0.00	1.00	1:1250

3.4 Spillage: Iso Contour

All ON

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



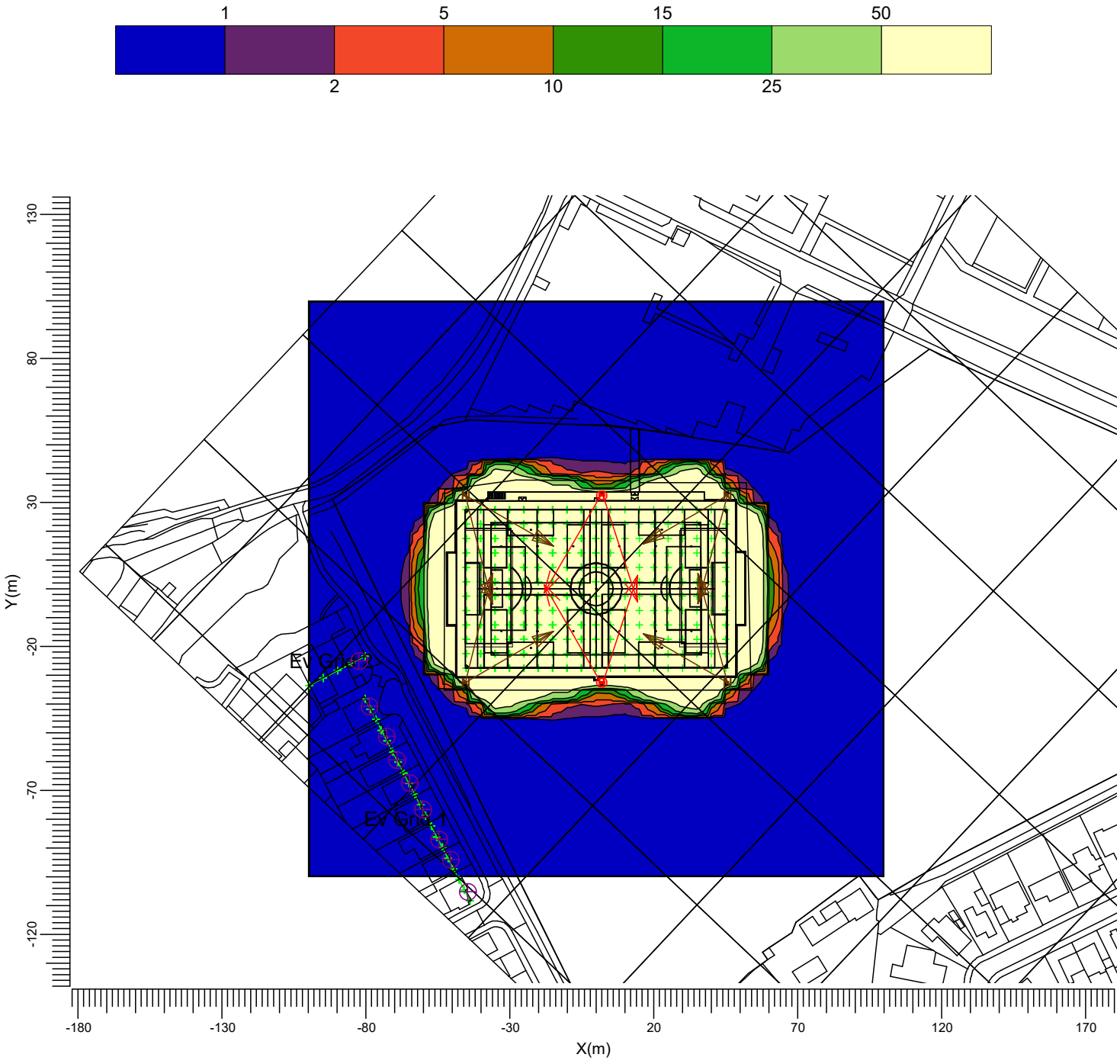
N → BVP528 OUT T35 A35-NB LO O → BVP528 OUT T35 A35-NMB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
43.1	0.00	0.00	1.00	1:1250

3.5 Spillage: Filled Iso Contour

All ON

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



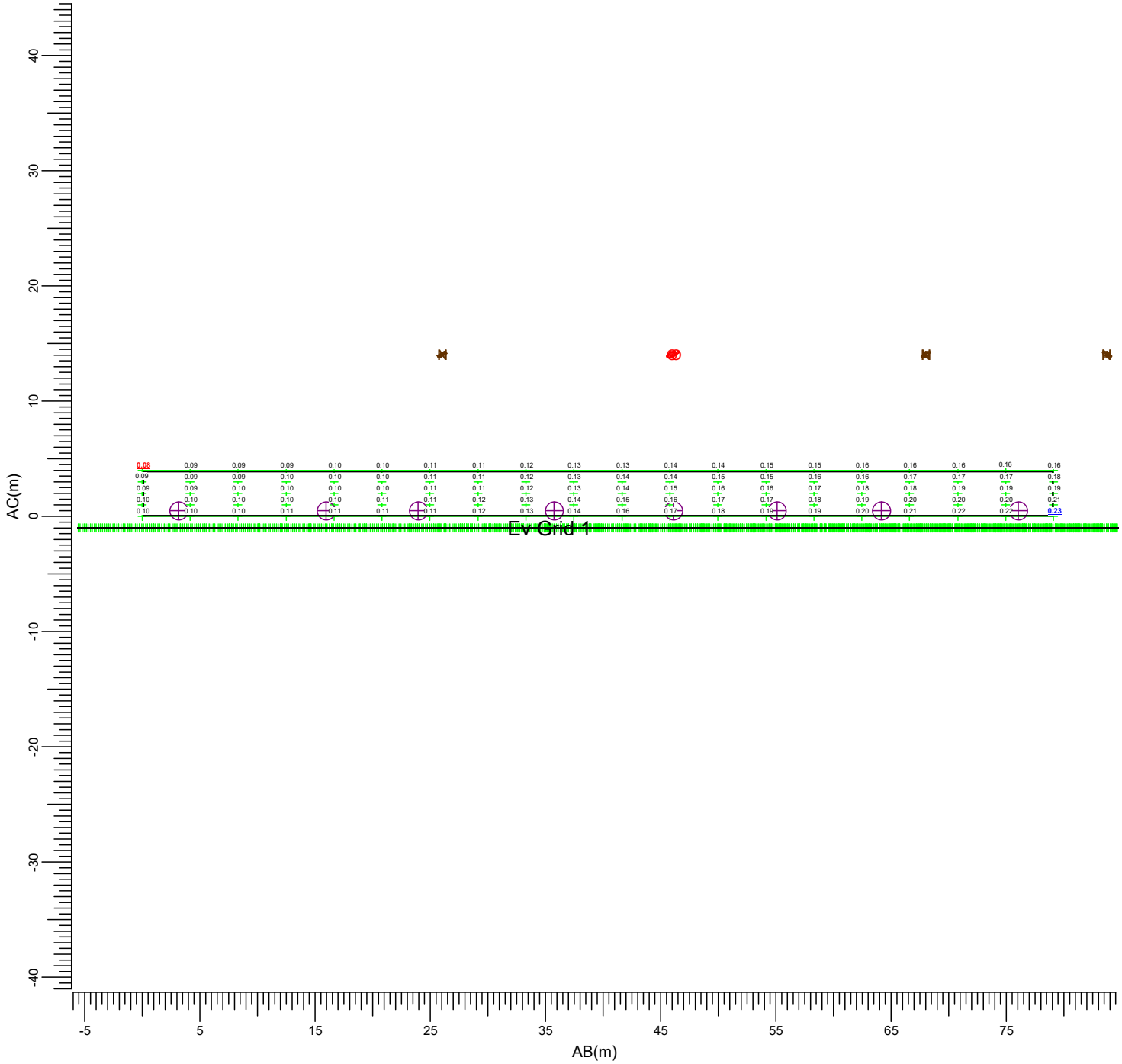
N → BVP528 OUT T35 A35-NB LO O → BVP528 OUT T35 A35-NMB L

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
43.1	0.00	0.00	1.00	1:2000

3.6 Ev Grid 1: Graphical Table

All ON

Grid : Ev Grid 1
Calculation : Surface Illuminance (lux)



(-43.80, -108.30, 5.00) C-----D (-80.30, -38.10, 5.00)
| |
(-43.80, -108.30, 1.00) A-----B (-80.30, -38.10, 1.00)

N : BVP528 OUT T35 A35-NB LO

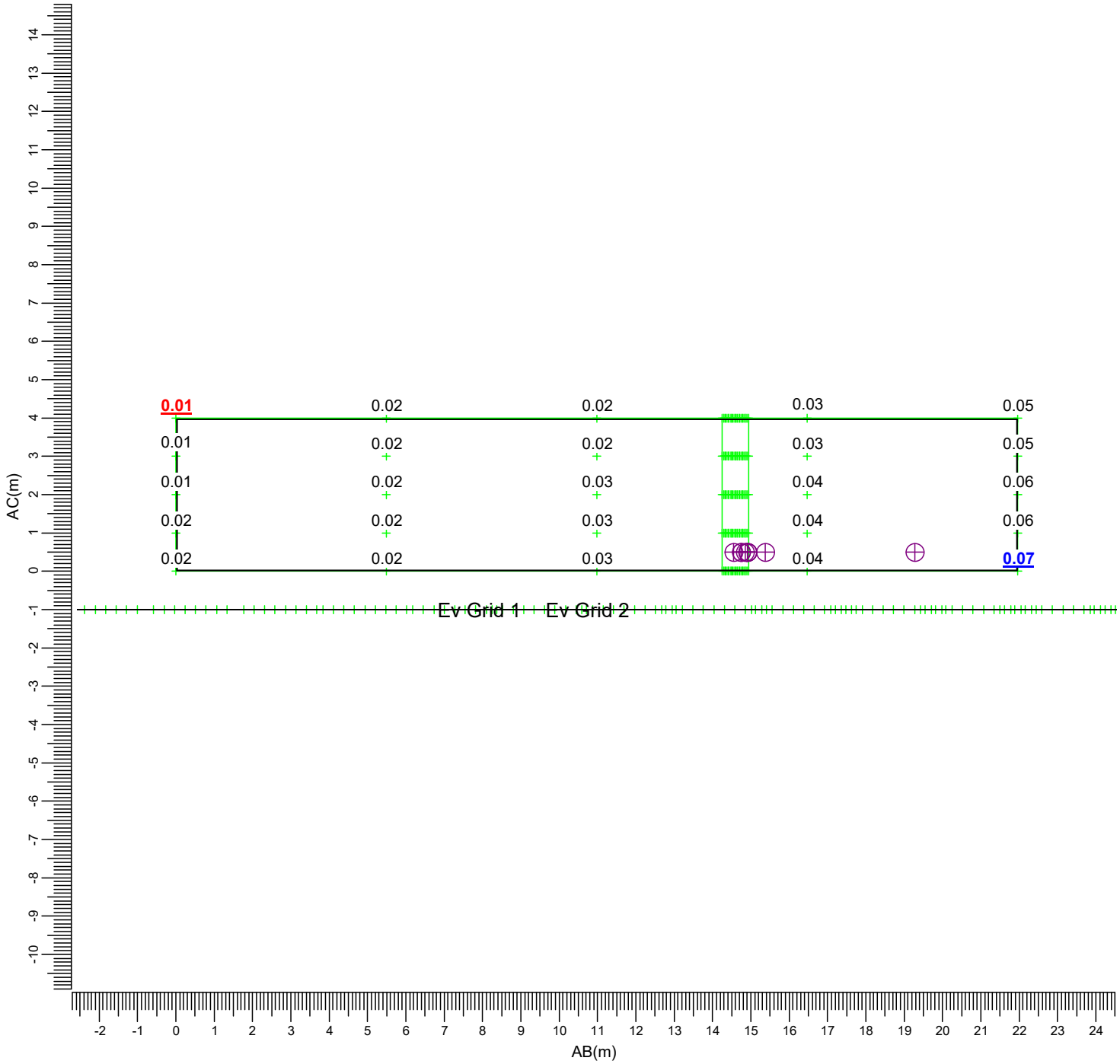
O : BVP528 OUT T35 A35-NMB LO

Maximum	Project maintenance factor	Scale
0.23	1.00	1:500

3.7 Ev Grid 2: Graphical Table

All ON

Grid : Ev Grid 2
Calculation : Surface Illuminance (lux)



(-99.60, -33.60, 5.00) C-----D (-80.20, -23.30, 5.00)
| |
(-99.60, -33.60, 1.00) A-----B (-80.20, -23.30, 1.00)

N : BVP528 OUT T35 A35-NB LO O : BVP528 OUT T35 A35-NMB LO

Maximum	Project maintenance factor	Scale
0.07	1.00	1:150

4. Luminaire Details

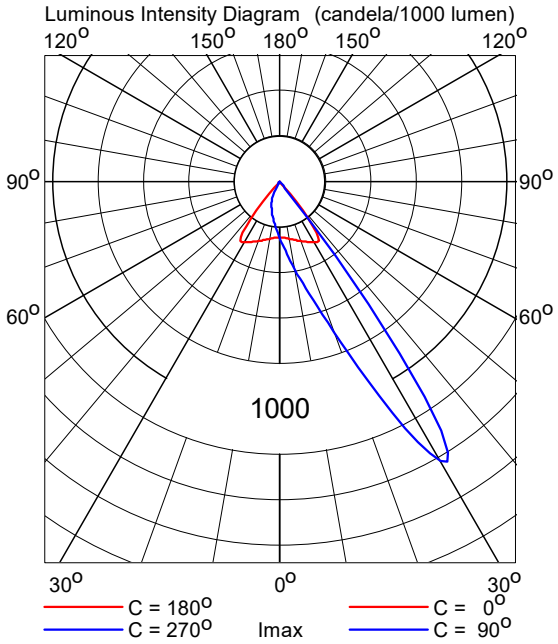
4.1 Project Luminaires

OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NB LO

Light output ratios
- DLOR : 0.59
- ULOR : 0.00
- TLOR : 0.59

Ballast : E3/D4I
Lamp flux : 259000 lm
Luminaire wattage : 1505.9 W
Measurement code : LVM2047300

Note: Luminaire data not from database.



OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NMB LO

Light output ratios
- DLOR : 0.58
- ULOR : 0.00
- TLOR : 0.58

Ballast : E3/D4I
Lamp flux : 259000 lm
Luminaire wattage : 1505.9 W
Measurement code : LVM2L47600

Note: Luminaire data not from database.