

Baglan Dragons FC

FOOTBALL LED - 250lux

Date: 02-09-2024

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

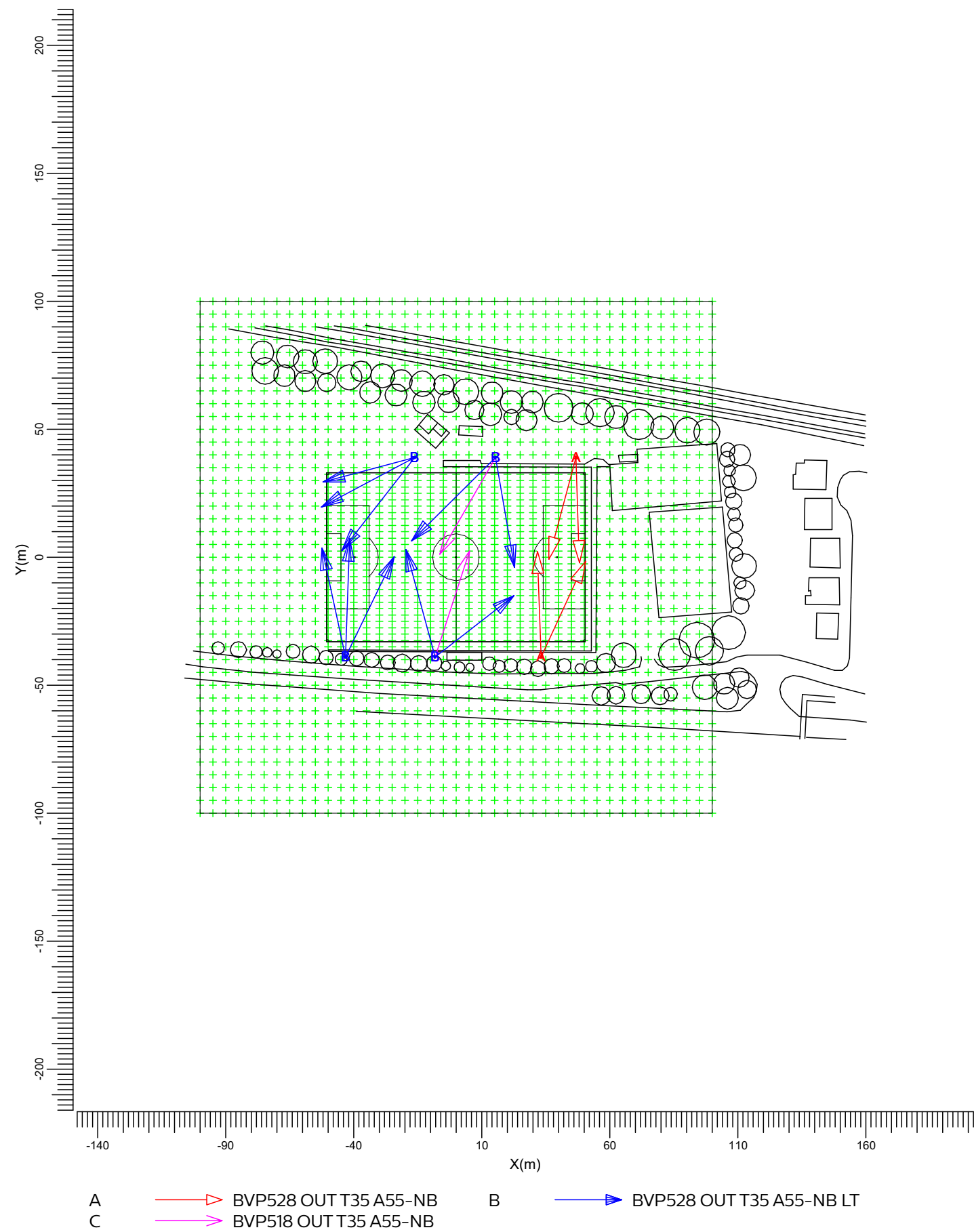
Maintenance Factor:- 0.95

Pitch 101 m x 66 m (+4 m run offs)

The design has been completed using the Philips Asymmetric OptiVision LED GEN 3.5 Floodlights. A total of 16 no have been used to achieve an average of 250lux.

Floodlights are mounted on 6 x 15 metre columns

1.2 Top Project Overview



Scale
1:2000

2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	4	BVP528 OUT T35 A55-NB	1 * LED2590-4S/757	1505.9	1 * 259000
B	10	BVP528 OUT T35 A55-NB LT	1 * LED2590-4S/757	1505.9	1 * 259000
C	2	BVP518 OUT T35 A55-NB	1 * LED1720-4S/757	1006.0	1 * 172000

The total installed power: 23.09 (kWatt)

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code			Power (kWatt)
	A	B	C	
Point1	0	3	0	4.52
Point2	0	2	1	4.02
Point3	2	0	0	3.01
Point4	2	0	0	3.01
Point5	0	2	1	4.02
Point6	0	3	0	4.52

2.2 Calculation Results

(II)luminance Calculations:

Calculation	Type	Unit	Ave Min/AveMin/Max		
Football	Surface Illuminance	lux	262	0.65	0.35
Spillage	Surface Illuminance	lux	66.2	0.00	0.00

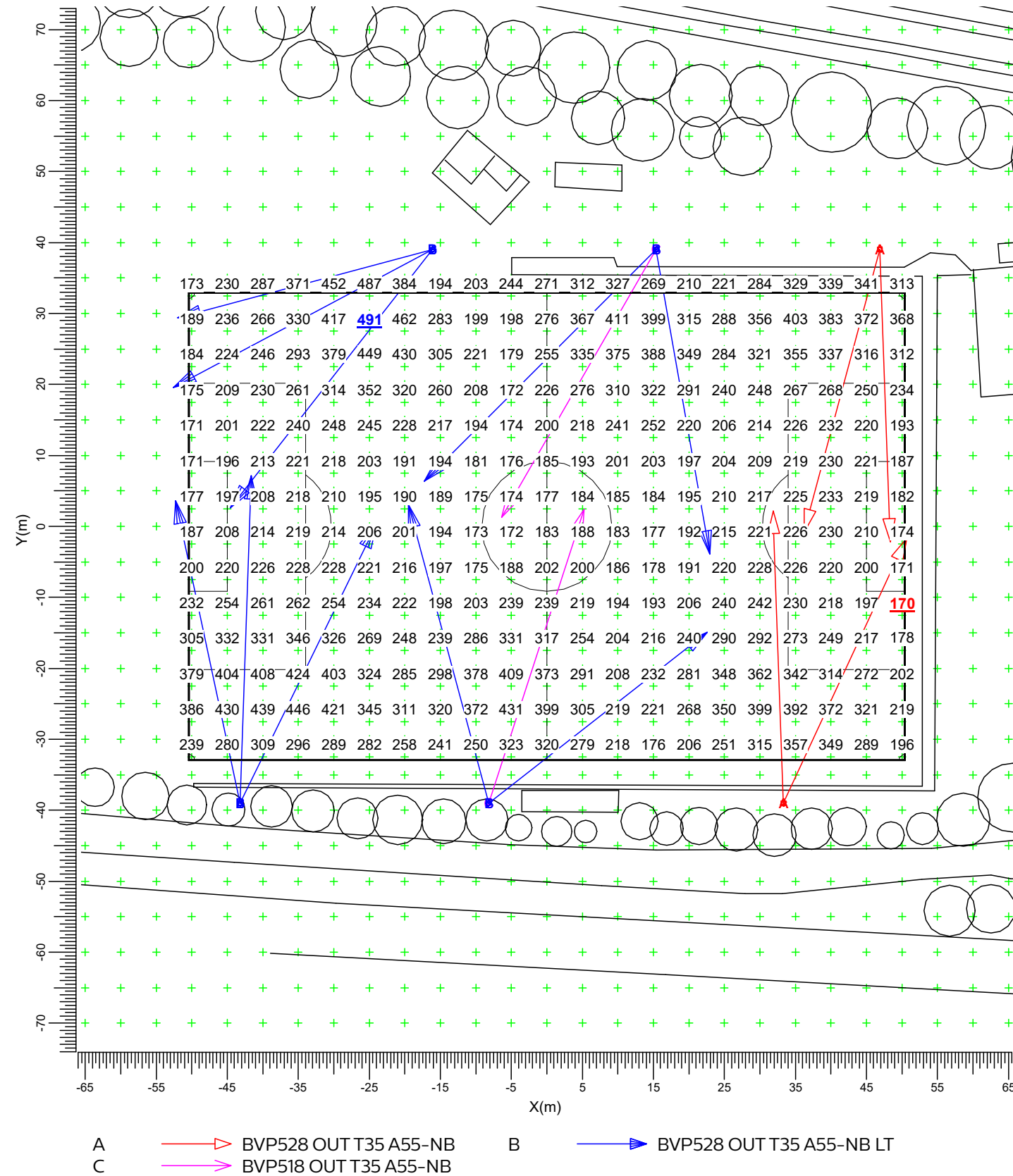
Obtrusive Light Calculations:

The upward light ratio (ULR) is 0.00.

3. Calculation Results

3.1 Football: Graphical Table

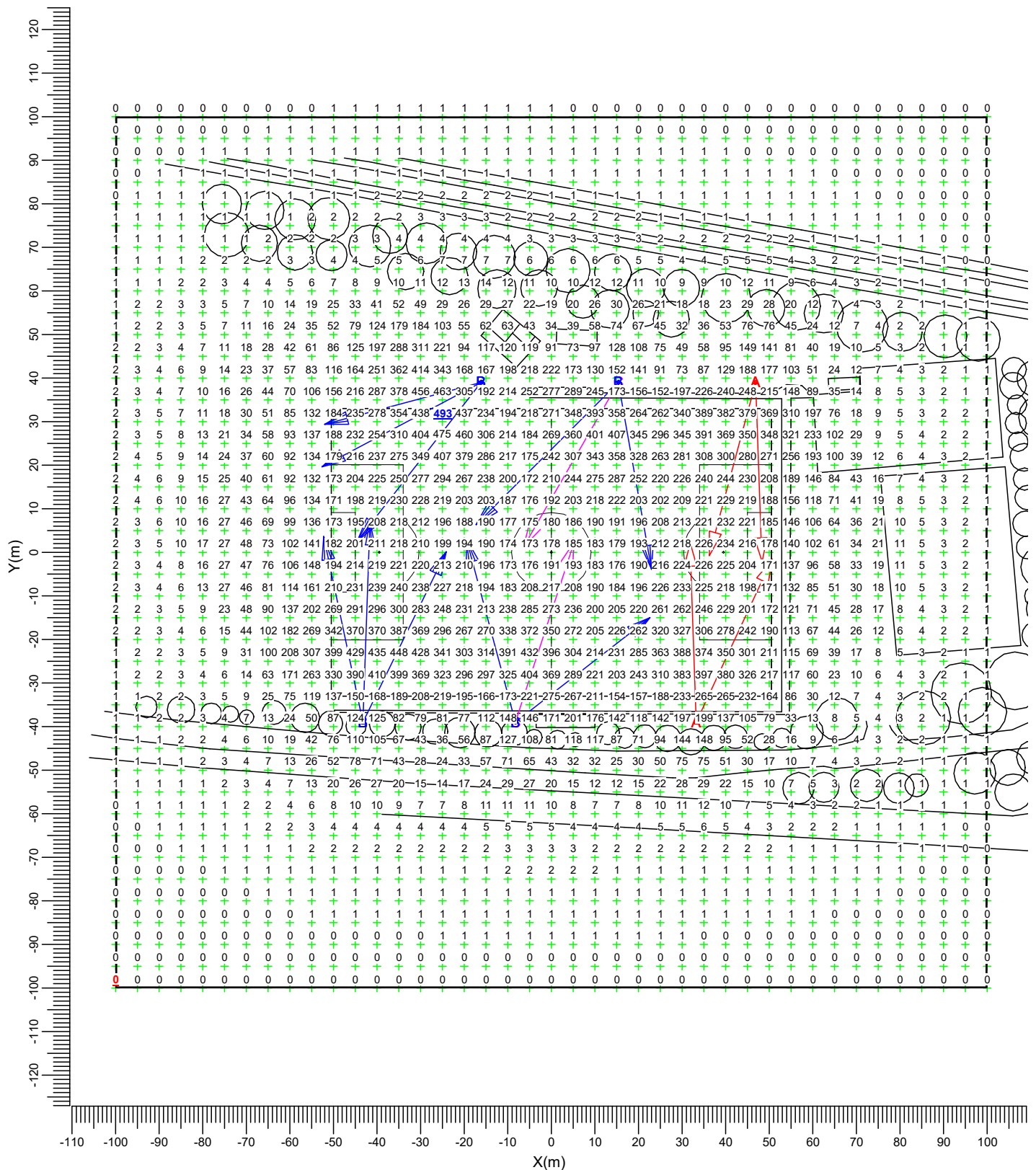
Grid : Football at Z = -0.00 m
Calculation : Surface Illuminance (lux)



Average	Min/Ave	Min/Max	Project maintenance factor	Scale
262	0.65	0.35	0.95	1:750

3.2 Spillage: Graphical Table

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



Average
66.2

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.95

Scale
1:1250

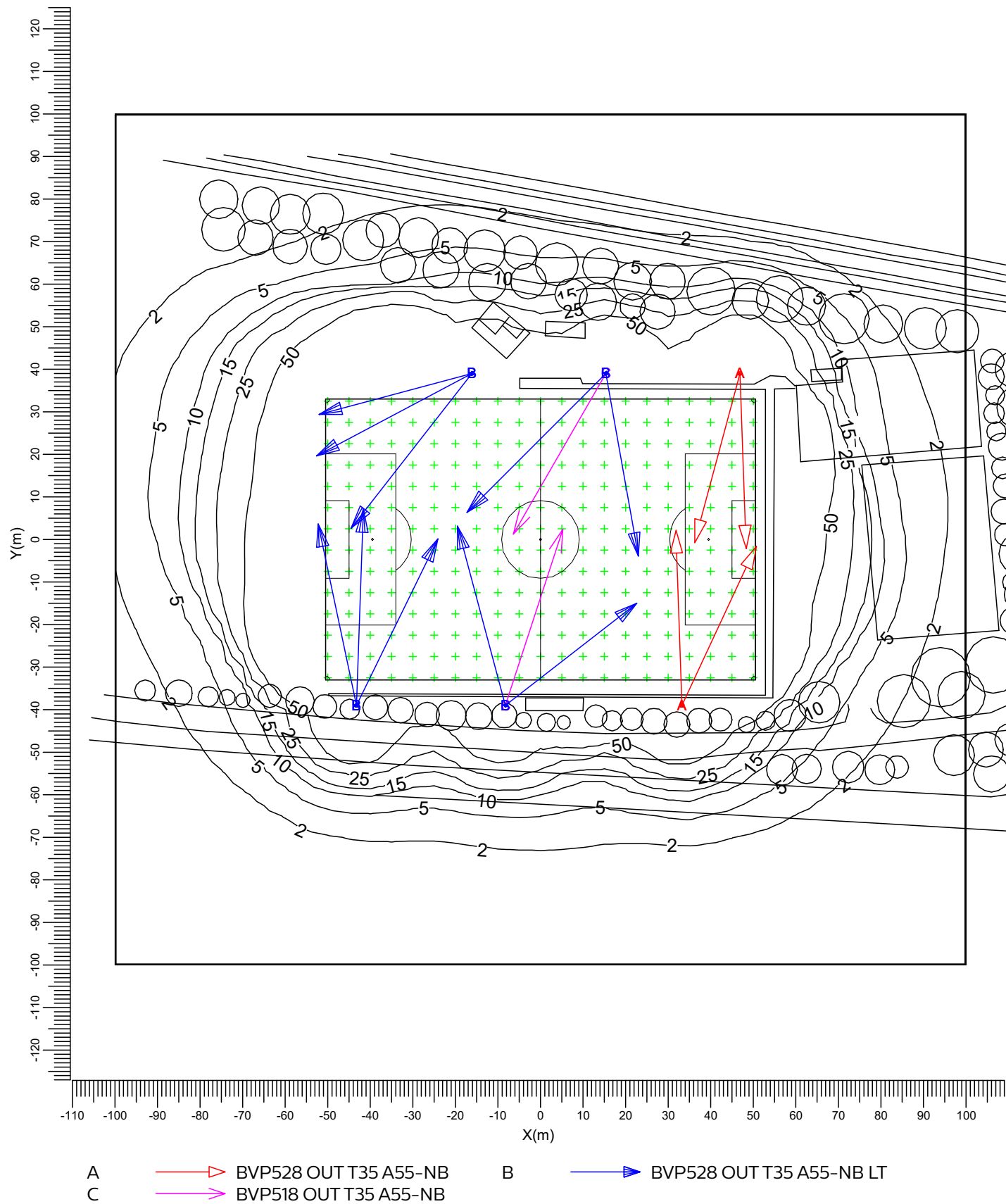
3.3 Spillage: Iso Contour

Grid

Calculation

: Spillage at Z = -0.00 m

: Surface Illuminance (lux)



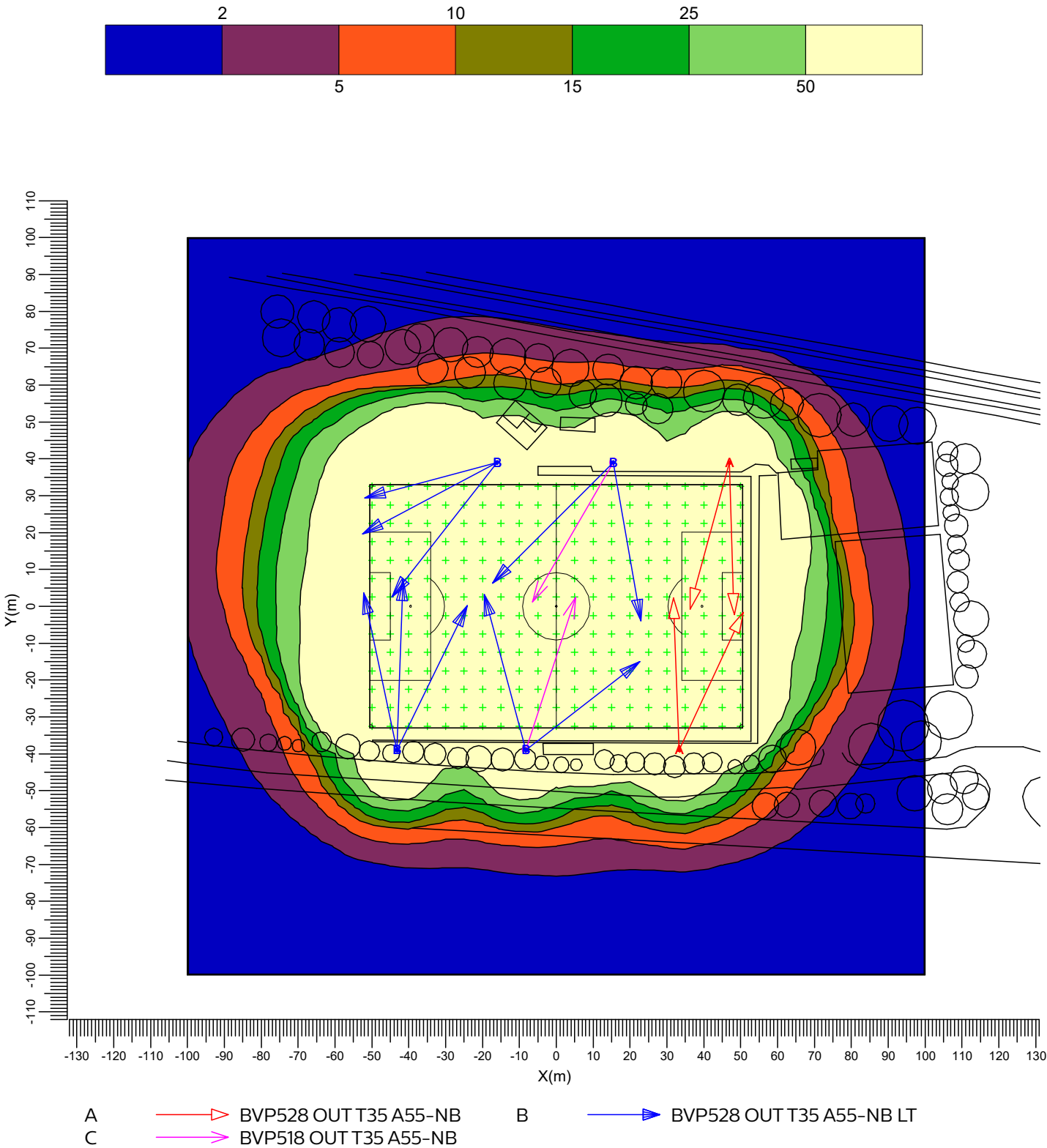
3.4 Spillage: Filled Iso Contour

Grid

Calculation

: Spillage at Z = -0.00 m

: Surface Illuminance (lux)



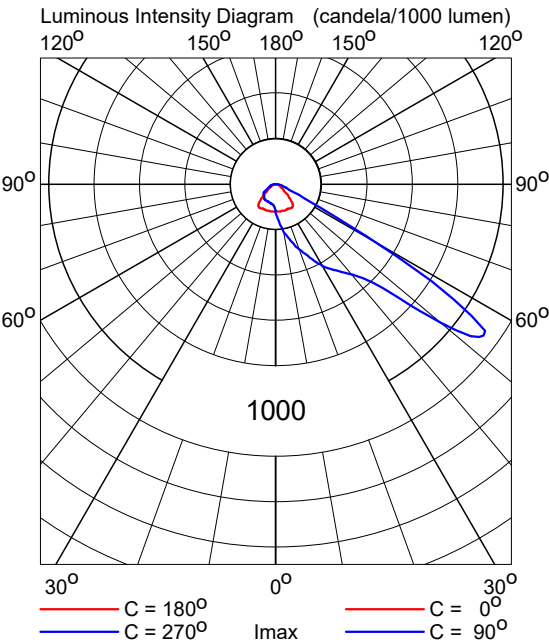
4. Luminaire Details

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

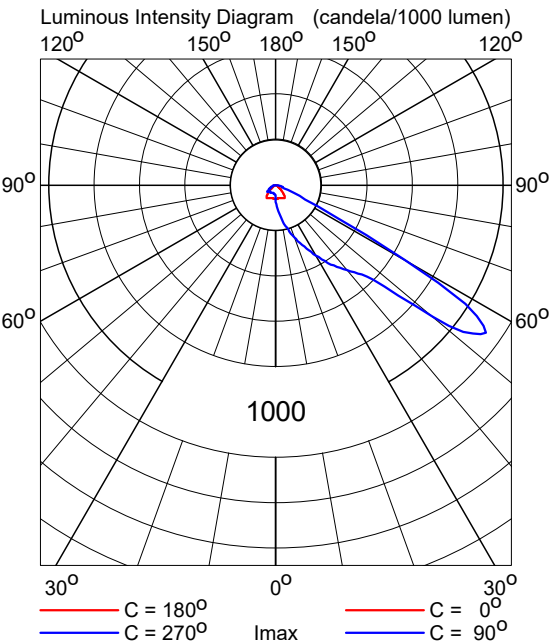
Note: Luminaire data not from database.



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

Light output ratios	
DLOR	: 0.71
ULOR	: 0.00
TLOR	: 0.71
Ballast	: E3/D4I
Lamp flux	: 259000 lm
Luminaire wattage	: 1505.9 W
Measurement code	: LVM20484U1

Note: Luminaire data not from database.



OptiVision LED gen3.5 2022
BVP518 OUT T35 1xLED1720-4S/757/757 E3/D4I A55-NB

Light output ratios	
DLOR	: 0.82
ULOR	: 0.00
TLOR	: 0.82
Ballast	: E3/D4I
Lamp flux	: 172000 lm
Luminaire wattage	: 1006.0 W
Measurement code	: LVA2111038

Note: Luminaire data not from database.

