

Leafy Lane Playing Fields

Artificial Turf Pitch

Project code: G-231622
Date: 13-06-2025

Designer: WB

Description: Proposed Lighting Scheme

Rugby and Football Match Play:
Maintained average illuminance >200 lux
Uniformity Ratio (Ev.min/Ev.ave) >0.60

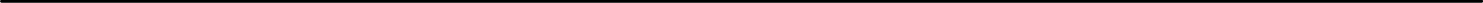
All luminaires have a zero upward light ratio without the use of additional accessories.

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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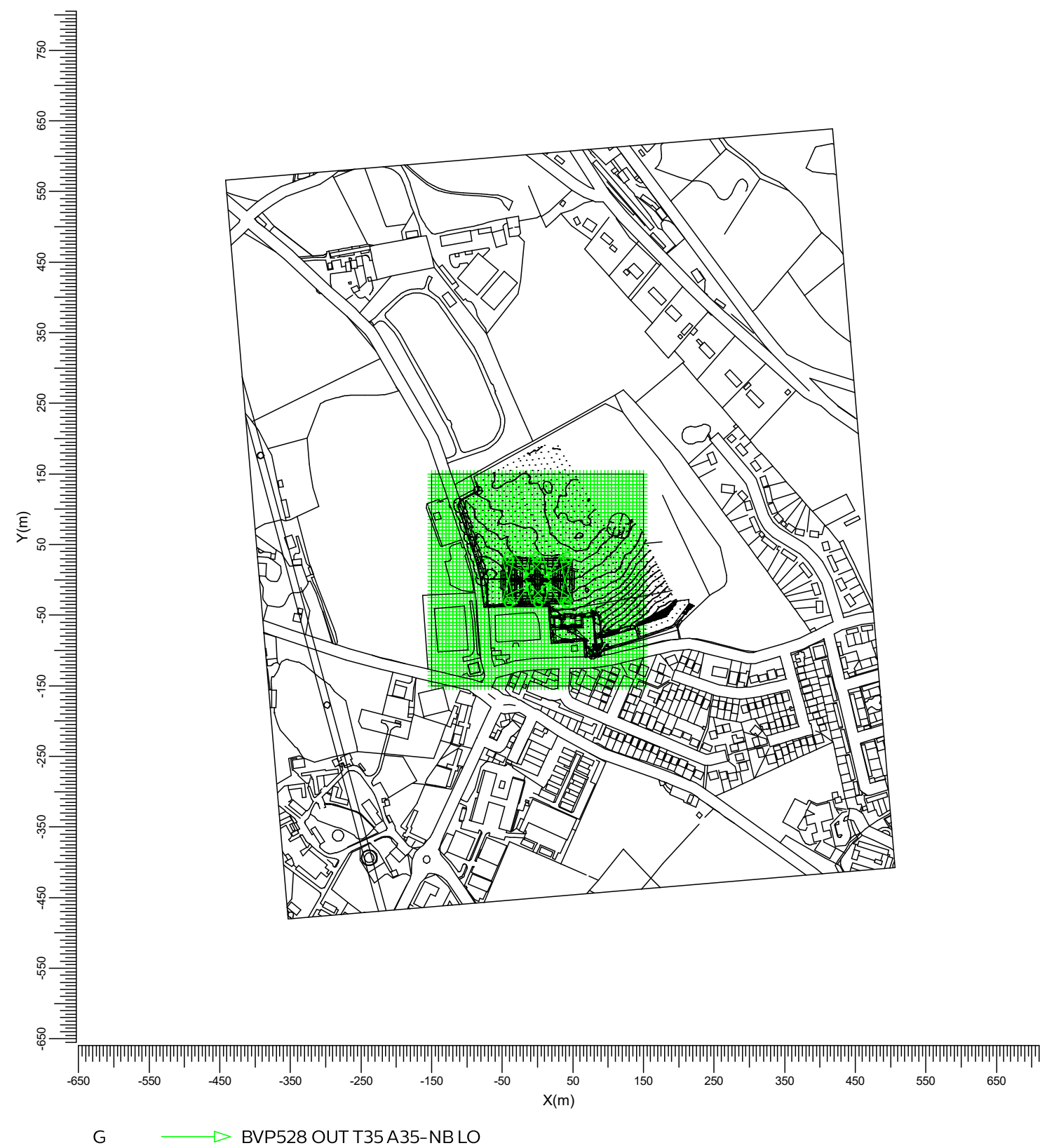
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1. Project Description

1.1 Top Project Overview



2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
G	12	BVP528 OUT T35 A35-NB LO	1 * LED2590-4S/740	1505.9	1 * 259000

The total installed power: 18.07 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code	Power (kWatt)
	G	
200 Lux Switching	12	-
Spillage Switching	12	-

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code	Power (kWatt)
	G	
Centre Bottom	2	3.01
Centre Top	2	3.01
North Masts	4	6.02
South Masts	4	6.02

2.2 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	200 Lux Switching	0.95
2	Spillage Switching	0.85

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
Football 200 Lux	1	Surface Illuminance	lux	210	0.60	0.42
Spillage Grid 0m	2	Surface Illuminance	lux	12.4	0.00	0.00

Obtrusive Light Calculations:

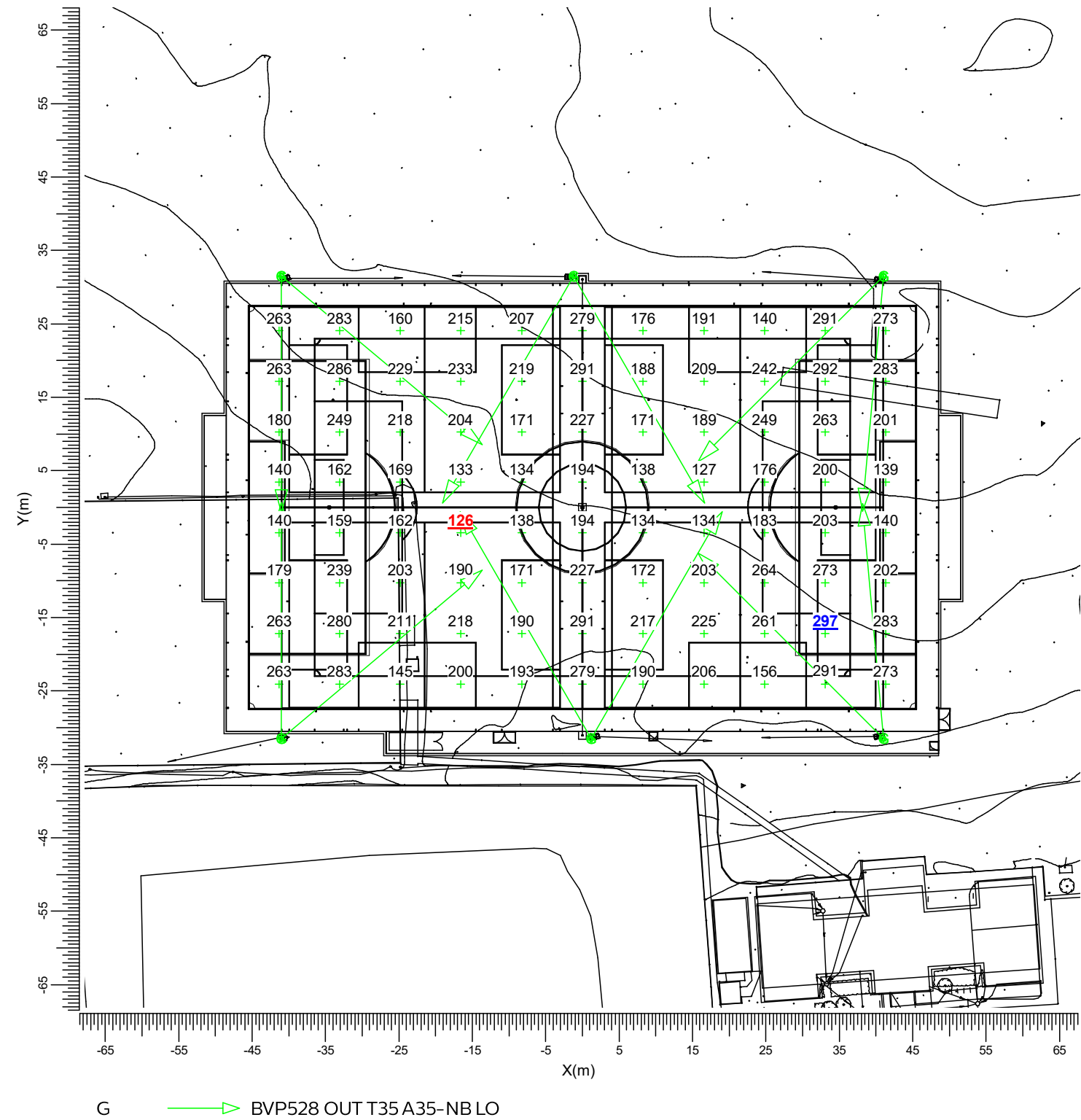
Switching Mode	ULR
1	0.00
2	0.00

3. Calculation Results

3.1 Football 200 Lux: Graphical Table

200 Lux Switching

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

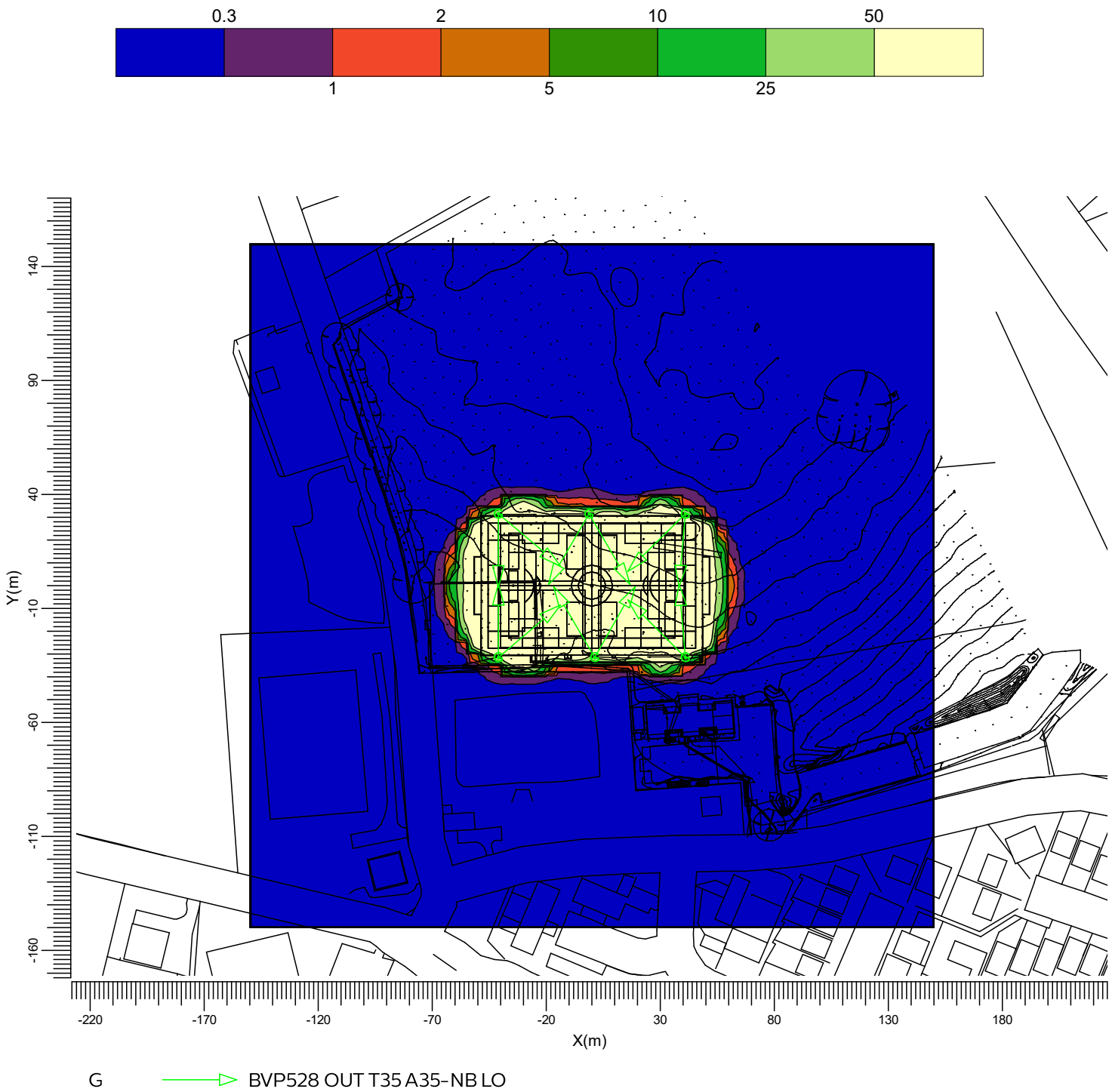


3.2 Spillage Grid 0m: Filled Iso Contour

Spillage Switching

Grid : Spillage Grid at Z = -0.00 m

Calculation : Surface Illuminance (lux)



Average12.4

Min/Ave0.00

Min/Max0.00

Project maintenance factor0.85

Scale1:2500

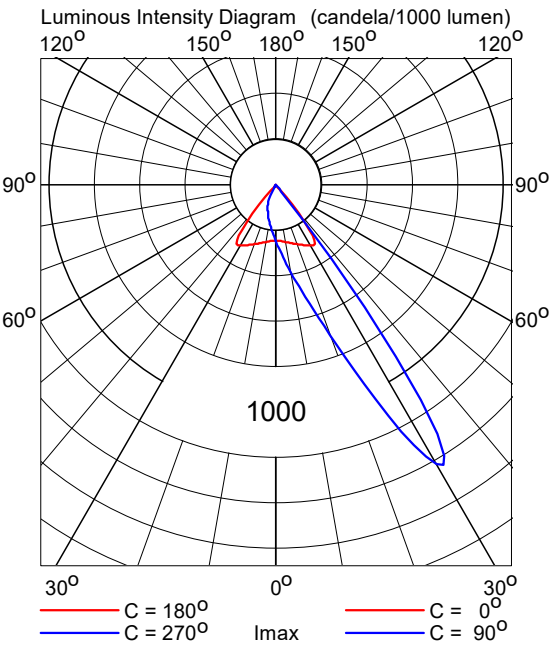
4. Luminaire Details

4.1 Project Luminaires

OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/740/740 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.



5. Installation Data

5.1 Legends

Project Luminaires:				
Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
G	12	BVP528 OUT T35 A35-NB LO	1 * LED2590-4S/740	1 * 259000
Switching Modes:				
Code	Switching Mode			
1	200 Lux Switching			
2	Spillage Switching			

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			Switching Modes (%)	
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2
1 * G	-41.00	-31.50	13.00	40.0	70.0	-0.0	75	75
1 * G	-41.00	-31.50	13.00	90.0	68.0	-0.0	75	75
1 * G	-41.00	31.50	13.00	-40.0	70.0	0.0	75	75
1 * G	-41.00	31.50	13.00	-90.0	68.0	0.0	75	75
1 * G	-1.20	31.50	13.00	-120.0	70.0	0.0	75	75
1 * G	-1.20	31.50	13.00	-60.0	70.0	-0.0	75	75
1 * G	1.20	-31.50	13.00	60.0	70.0	0.0	75	75
1 * G	1.20	-31.50	13.00	120.0	70.0	-0.0	75	75
1 * G	41.00	-31.50	13.00	135.0	70.0	-0.0	75	75
1 * G	41.00	-31.50	13.00	95.0	68.0	-0.0	75	75
1 * G	41.00	31.50	13.00	-135.0	70.0	0.0	75	75
1 * G	41.00	31.50	13.00	-95.0	68.0	0.0	75	75