

AFAN UTD PROPOSES OVERSPILL LIGHTING CONTROL / REDUCTION MEASURES

May 2025

As the existing lighting system is no longer serviceable it has not been possible to carry out a survey of the existing lighting and overspill levels for a direct comparison to the proposed new lighting installation, However we can confidently advise that if the existing 2kw Metal Halide floodlighting system was fully functional and operating at its original designed lighting level of 300+ lux the overspill produced by the system would be considerably higher than the latest LED design provided by Philips / Signify.

In order to demonstrate the effectiveness of the proposed new lighting system an overspill prediction has been produced showing the results with the existing columns in situ, 2 additional overspill predictions have been provided to demonstrate the resulting overspill measures with the 2 columns at the Eastern end of the pitch relocated at the end of the pitch, this will facilitate the floodlights being aimed away from the nearby houses and towards the pitch resulting in a reduction in the light levels on the Gardens / houses.

In addition the lighting design / proposal incorporates the “LO” versions of the Philips Optivision LED floodlight which has the maximum overspill lighting control achieved by using individual louvres for each led emitter.

We have provided a design showing further reduced overspill levels when the system is dimmed to 100 lux average which is suitable for training purposes.

By using timers / control systems it is possible to ensure the higher lighting levels are only used for match purposes and access would be accessible to these higher levels by authorised persons only.

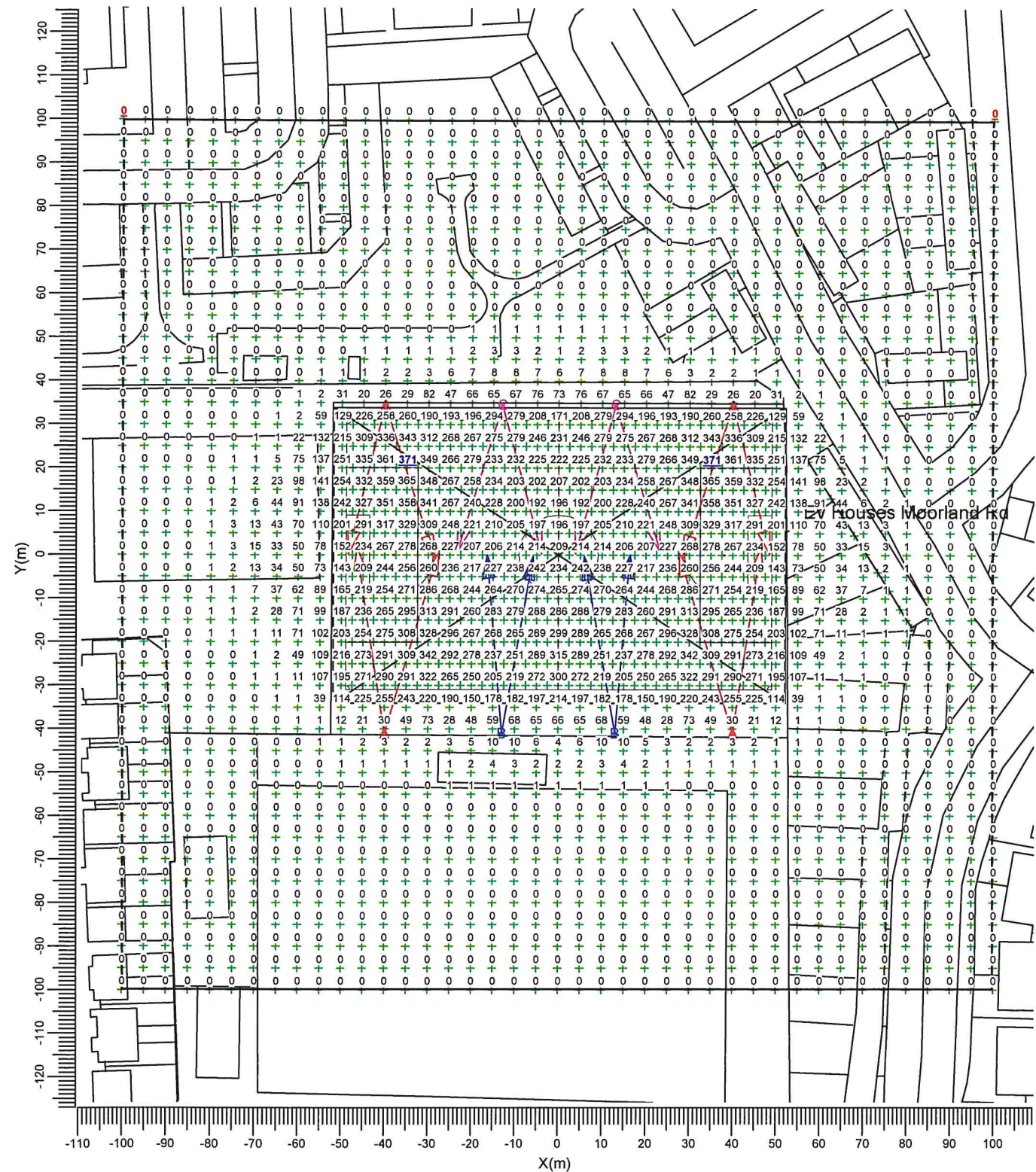
Darren Brearley

Head of Technical Operations

EXISTING MODEL

3.2 Spillage: Graphical Table

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



A B
C

→ BVP528 OUT T35 A35-NB LO → BVP518 OUT T35 A35-NB LTM
→ BVP518 OUT T35 A35-MNB LT

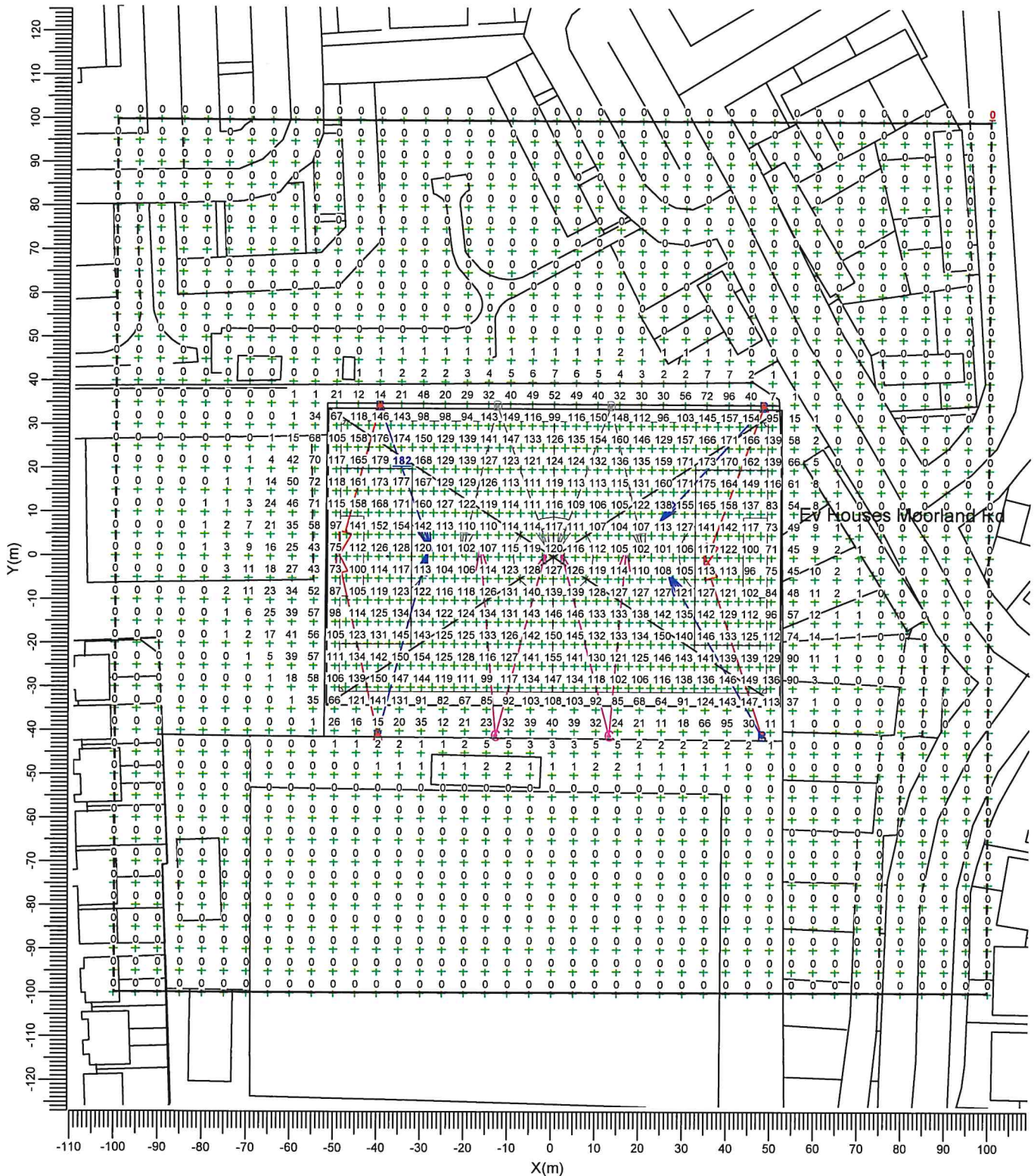
Average	Min/Ave	Min/Max	Project maintenance factor	Scale
49.1	0.00	0.00	0.95	1:1250

PROPOSED IMPROVED MODEL 100LUX - TRAINING

3.7 Spillage 100lux: Graphical Table

Main Pitch 100lux

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



A — BVP528 OUT T35 A35-NB LO B — BVP528 OUT T35 A35-NMB L
 C — BVP518 OUT T35 A35-NB LTM D — BVP518 OUT T35 A35-MNB LT

Average
24.5

Min/Ave
0.00

Min/Max
0.00

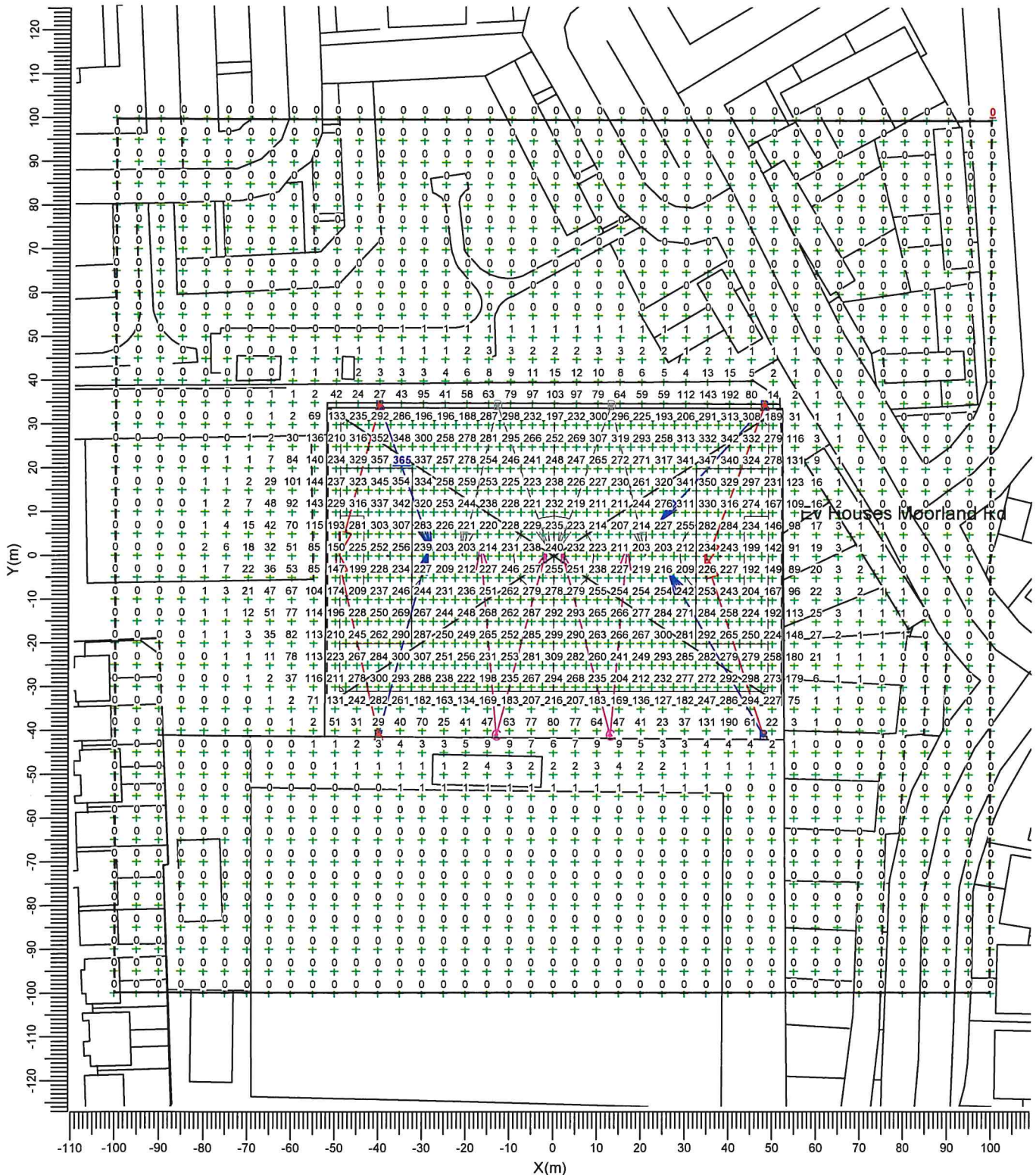
Project maintenance factor
0.95

Scale
1:1250

**PROPOSED IMPROVED
MODEL 250LUX - MATCH****3.2 Spillage 250lux: Graphical Table**

Main Pitch 250lux

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



A BVP528 OUT T35 A35-NB LO B BVP528 OUT T35 A35-NMB L
C BVP518 OUT T35 A35-NB LTM D BVP518 OUT T35 A35-MNB LT

Average
49.0

Min/Ave
0.00

Min/Max
0.00

Project maintenance factor
0.95

Scale
1:1250



OptiVision LED floodlights

Understanding our Louvres

August 2021

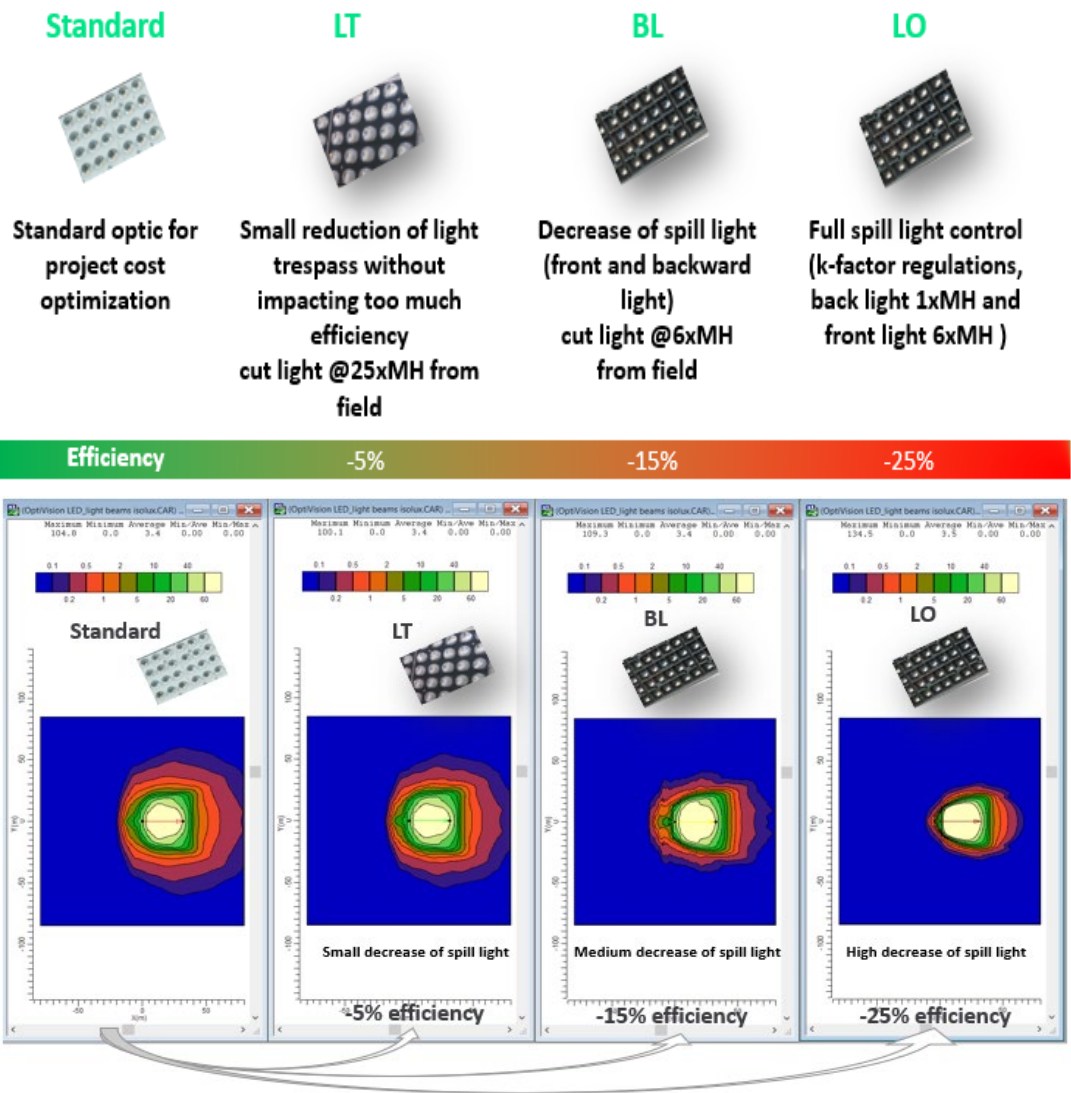
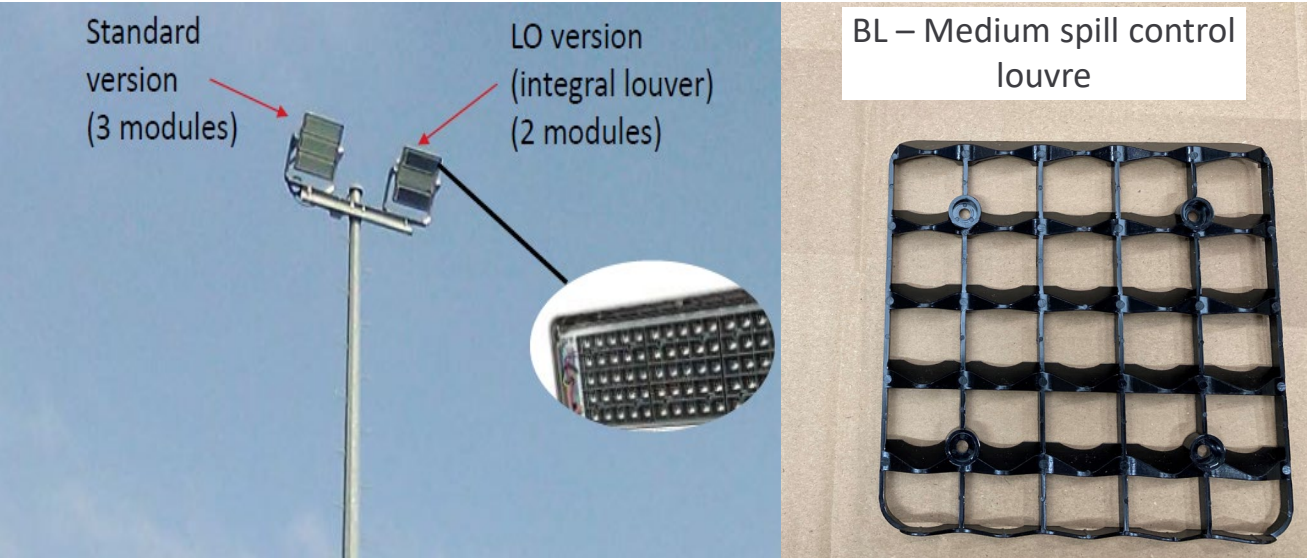
Why use Integral louvres

- Offers the possibility of reducing the spill light on a project.
- You achieve maximum effectiveness mounting against the LED chip and Optic
- Ensure compliance to planning regulations.
- Limit source intensities (cd) to observers.
- External louvres on Asymmetric floodlights are ineffectively due to the distance from the LED diodes.

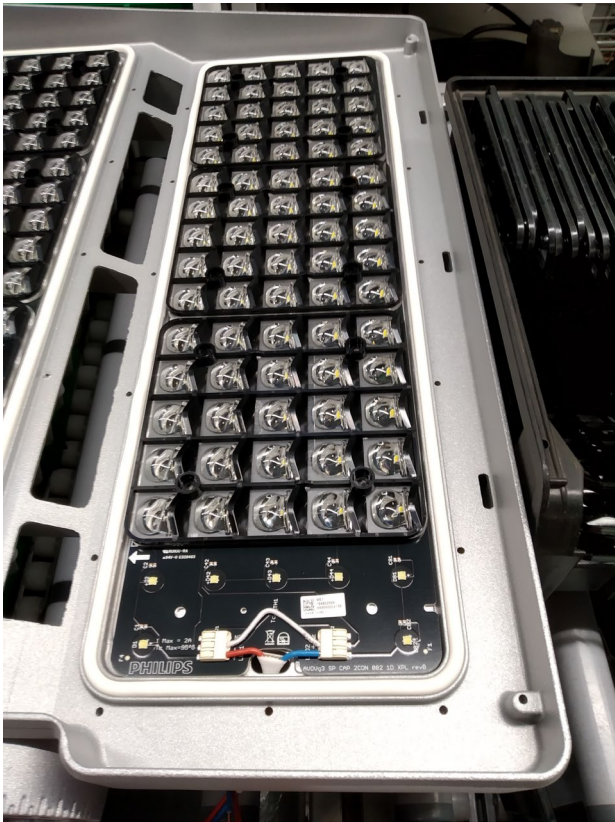


Integral louvres explained

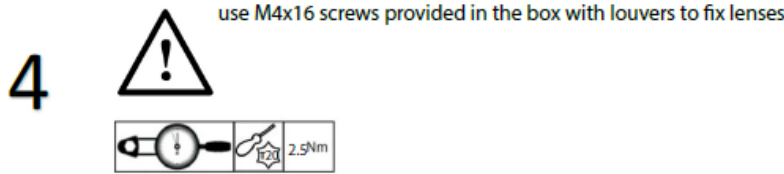
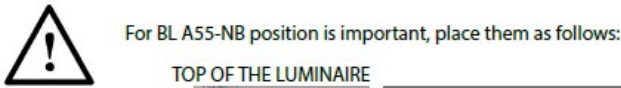
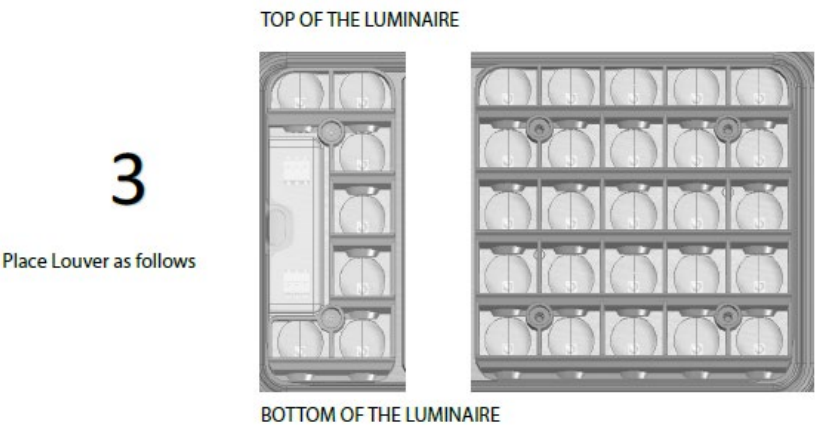
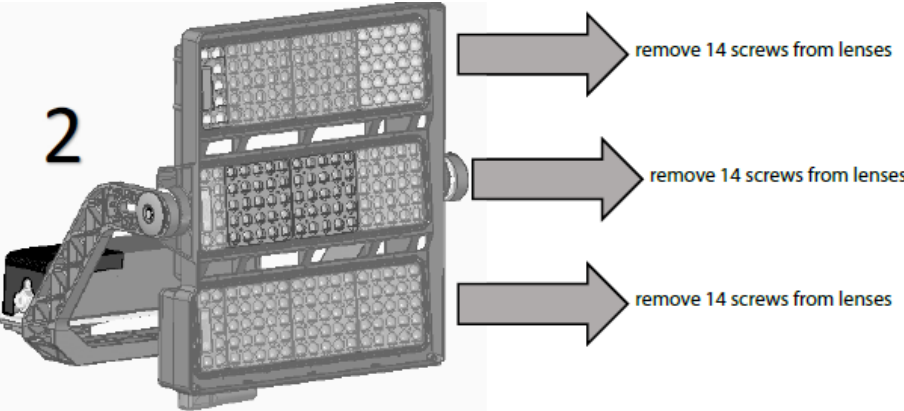
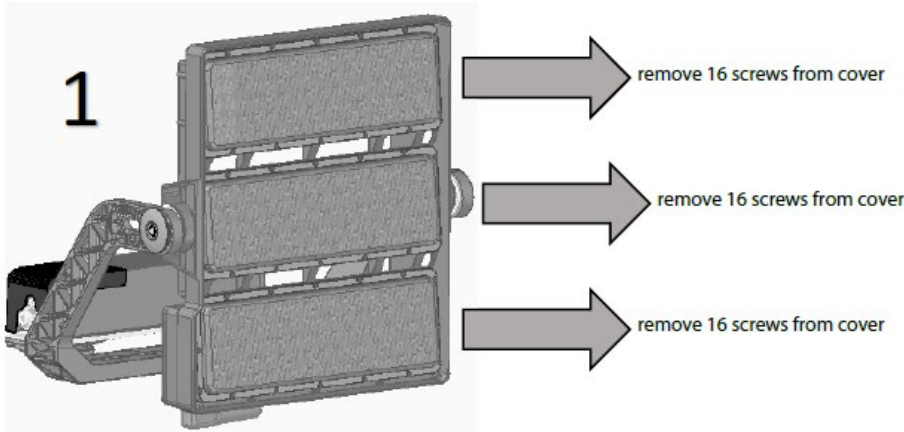
- 3 types of integral louvres available
- LT – Small spill control
 - BL – Medium spill control
 - LO – Full Spill control (Maximum effect)



Factory built to ensure correct Positioning



Factory Installation process



Comparison – Standard optic V LO integral louvre



Example Projects – Importance of spill control....



Example Projects – Important of spill control....



Example Projects – Important of spill control....



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