

PROJECT CASE STUDY Loganair

The maintenance hangar operated by **Loganair** at Glasgow Airport, had outdated and inadequate lighting. **Kellwood Lighting** was briefed to supply a technically demanding sixfold increase in light levels, while delivering a reliable and efficient solution.

A further challenge was provided by a need to absolutely minimise disruption due to a tightly packed, time sensitive maintenance schedule, making a turnkey solution provided by a single company essential.



Kellwood's Solution

Kellwood's Lighting and Electrical divisions worked closely together to put forward the chosen solution. Multiple designs were modelled, analysed and iterated to ensure an optimised design from both lighting and installation perspectives.

Lighting Design

Due to the huge increase in lux levels, a major concern was how to find the most cost effective method of meeting the light level targets without increasing glare. The standard method of achieving this would be to increase the number of lights, however installing new mounting points would have necessitated exceeding the tight installation window and exceeded the desired budget.

Kellwood's solution was to mount our high efficiency, low glare **Haldane Series** in pairs, together with an advanced multi-step dimming, daylight harvesting occupancy controlled sensor, mounted on a customised bracket system. This allowed the necessary increase in units without expensive alterations to the wiring infrastructure.

The daylight harvesting and occupancy control allows the new solution to meet the lighting targets while consuming less power than the previous solution



Installation

Detailed planning and close communication were essential to identify and mitigate potential problems and streamline the installation plan according to allocated timeslots in each maintenance zone.

The lights and sensors were assembled onto the bespoke bracketry in house and delivered on custom made pallets to ensure the whole process was both simple and rapid. This all made for an extremely efficient and cost effective installation on site, ensuring the project was delivered to the time-scales requested by our client.



Before

Average Light Level:

193lux

Operation:

24/7

Maintenance:

**Regular
re-lamping
required**

After

Average Light Level:

1100lux

(in working
zones
maintained
through
daylight
harvesting
and multi-step
dimming)

Maintenance:

Minimised

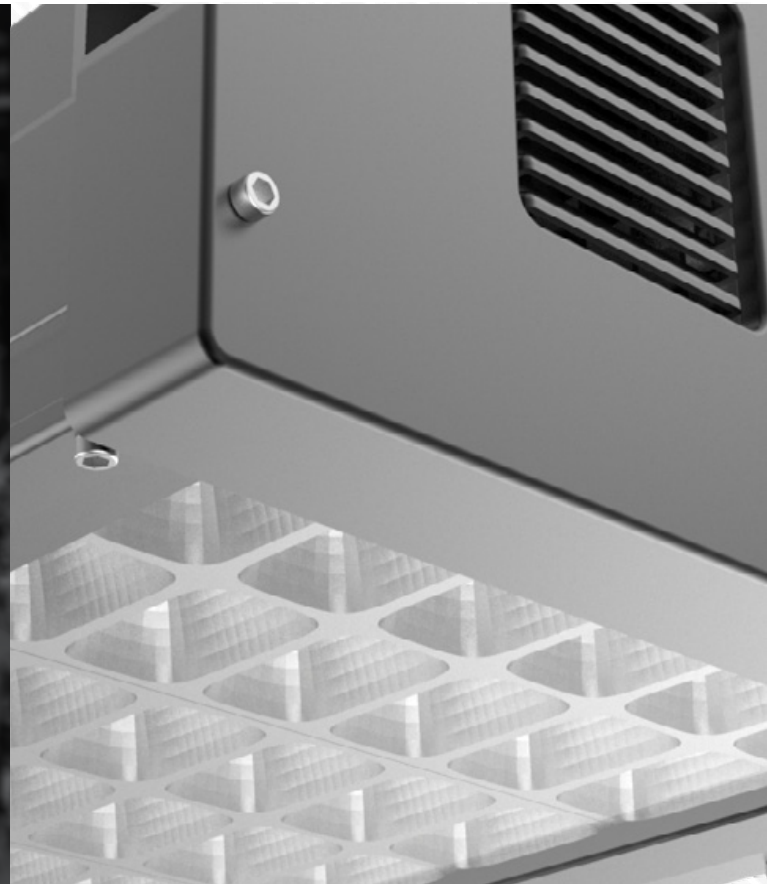


Design Features

- Luminaires used – 310W Haldane Series
- Maintained Lux Levels – 1100lux
- Glare - <19 UGR
- Increase in working light levels – 600%

Intelligent Controls

- Occupancy sensing
- Daylight harvesting
- Multi-step dimming
- Quick Analytic data retrieval



"I'd like to offer my sincere appreciation and admiration for a project that was well planned and promptly accomplished."

Eamon McHugh
Head of Base Maintenance