

## Finisher Case Study

### UK Based Test Farm

Biolumen Series 500 lighting technology is shown to improve pig welfare by reducing vice and improving feeding. Ultimately an improvement in FCR results in a 14 month return on investment even before taking electricity savings into account.

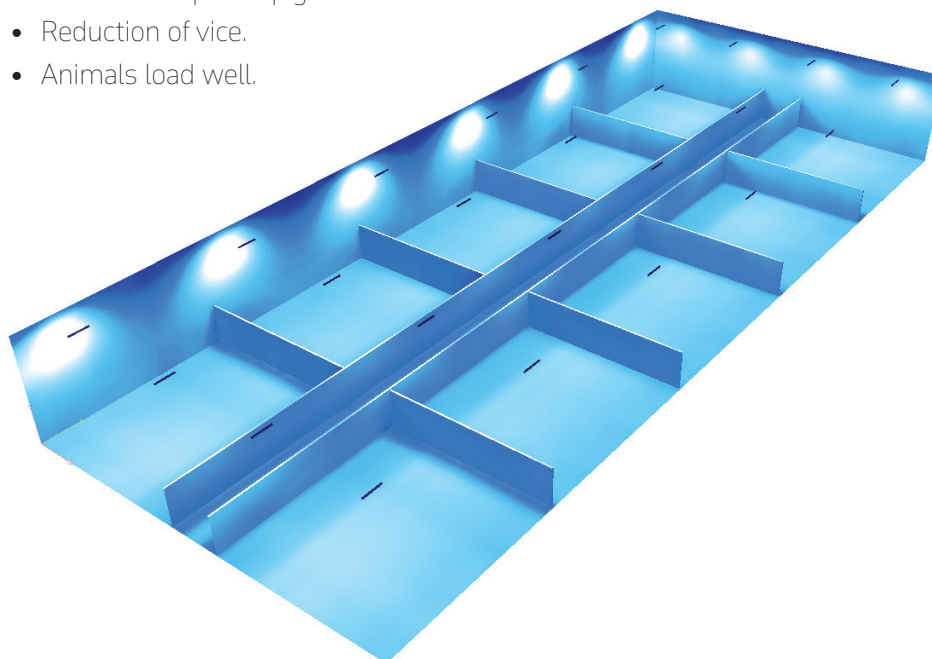
**Two rooms were compared to an identical two fitted with a competitor's induction LED lighting system. The trial ran for 6 full batches; 3 under Biolumen Series 500 lights and 3 under the other brand lights, with a total of 2400 pigs. Entry and exit weights, removals and feed intakes at pen level were recorded and statistical analysis was applied.**

### Results

There was a statistically significant improvement of 0.09 FCR when using the Biolumen Series 500 lights. This improvement may not have only come from individual pig performance, but also linked to a reduction of aggression in the pigs. Streptococcus is endemic on the unit and fewer pigs were removed due to sudden mortality when lit with the Biolumen lights.

Other anecdotal results:

- Convermax treatment was needed on batches under conventional LED due to level of removals, but not under Biolumen Series 500.
- Calmer and quieter pigs.
- Reduction of vice.
- Animals load well.



### Specification

**Size of room:** 10x25m

**Lights:** 24 x BioLumen Series 500 Blue, designed to improve the visual acuity of pigs

**Mounting:** 4 rows of catenary wire at 2.8m height

**Control:** 1 x BioLumen Master Control Unit to allow flexible photoperiod control

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## Saving Calculations

Cost of equipment per room	Feed saved per batch	Cost of feed	Annum savings
£3050	2.04 tonnes*	£225 per tonne	£2622

ROI of 14 months BEFORE electricity savings

\*based on 60 day batch time with 2 days to wash or 2280 pigs per year

## Technology

Biolumen lighting includes our patented Nature Perfect blue LED technology which is comfortable for humans to work under, but also perfectly placed to improve animal visual acuity as well as entrain hormonal processes with the use of proper control of light/dark periods.

- ✔ Low Energy
- ✔ Low Carbon Footprint
- ✔ Low Voltage
- ✔ Easy Installation
- ✔ Suitable for Harsh Environments
- ✔ IP67 (waterproof)
- ✔ Resistant to Ammonia
- ✔ Impact Resistant
- ✔ +3 Year Warranty
- ✔ UK Designed
- ✔ UK Based Support

Nature **NP**<sup>™</sup>  
Perfect



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