



Animal-Centric Lighting Systems for Swine



RAISE HEALTHIER AND LESS STRESSED SWINE



It's a big responsibility to successfully raise swine. Between keeping the animals healthy and virus free, while providing excellent pig care, it can be difficult to obtain optimal results turn after turn. At ONCE® we understand the challenges and are here to help.

As the first company to pioneer animal lighting systems based on scientific research, we've developed innovative solutions that improve both production and animal welfare. Our scientific discoveries have not been simple, but our relentless effort to unlock the potential of light has revolutionized the industry to where it is today.

Based on photobiology and backed up by scientific research, we have become an industry leader by focusing our efforts on finding solutions that show **proven, measurable results**[†]. We leverage these results using our swine-specific Dim-to-Calm™ technology with the three key aspects of lighting needed to experience success: spectrum, intensity and photoperiod.

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Science is our secret

A thorough understanding of the way animals perceive and respond to the different characteristics of light matters. Here's why:

Animals see differently

The spectral characteristics, as well as the intensity, affect how light is perceived. What we see is made up of light reflected from the objects we look at. The Photopic Spectral Response Graphs shown to the right demonstrate how most humans, who have three visual cones, see green and yellow colors more intensely than they see blue and red.

Swine see colors much more subdued than humans do. They have two pigment cones and can only see two distinct colors, blue and green, with the highest sensitivity being green light. The How Swine See graph shows that pigs' eyes are least sensitive to the color red – they barely see it at all.

Experience the benefits today!

Our cutting-edge lighting systems are designed to provide exceptional light quality for both the swine and humans caring for them. They control spectrum, photoperiod and light intensity. This results in enhanced production metrics at every stage of life.

Improve pre-weaning conditions

Studies have suggested that choosing swine-specific LED lighting with our recommended light schedule can have a positive impact on pre-wean mortality. This may be the result of lower-stress sows and fewer neonatal crushes.

Support reproductive and production performance

Lighting plays a significant role in reproductive and overall swine production performance. Each level of production requires different light levels and photoperiods. The amount and type of environmental light swine receive directly affects hormonal cycles. The correct design of an artificial lighting system in a swine barn promotes healthy development, growth and reproductive performance.

Enhance animal welfare

By providing a natural sunrise and sunset simulation, our lighting systems eliminate extreme changes in light, eliminating multiple stress inputs and lowering mortality rates, while improving immune response. Our technology also allows the lighting fixture to fully dim red, which swine perceive as near darkness. This allows the red light to be used as a "service light," so workers can access the facility without disturbing or interrupting the swine's sleep cycles.

See the results

At ONCE® we care about your animals and are dedicated to providing them with the best lighting possible. With our scientific approach to photobiology, along with our systems' rugged and durable design, we offer the optimal solution. When supplied with the right tools, you'll have healthier, notably less stressed pigs with improved livability and performance.

Photopic Spectral Response Graph

