



Animal-Centric Lighting Systems for Broilers



EXPERIENCE HEALTHIER AND MORE PRODUCTIVE **BROILERS**

At ONCE® we understand that modern poultry production has evolved into a science. With every chick placement growers face new obstacles ranging from regulations and production costs to the unexpected. We understand that it can be difficult to achieve optimal results on a regular basis and want to help you maintain consistent success.

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 rigorous scientific process has allowed us to unlock the potential of light and ensured the success of our customers.

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**[†]. These results leverage three key aspects of lighting needed to experience success when raising broilers: spectrum, intensity and photoperiod.

www.once.lighting

broilers@onceteam.com • 15255 23rd Avenue North, Plymouth, MN 55447 • T +1 (763) 381-5621

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. But eyes aren't the only organ that processes light. Poultry identify light through extra-retinal, non-visual, pathways as well.

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. The How Poultry See graph shows that chickens, who have four visual cones, are more sensitive to blue and red light. And what about the far left, smaller peak? It's the UV spectrum. Chickens can see UV light, and humans cannot.

Experience the benefits today!

Our cutting-edge lighting systems optimize spectral output to target an animal's highest color sensitivity. They control spectrum, photoperiod and light intensity. This results in enhanced production metrics at every stage of life.

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. This is supported by blood assays for short- and long-term stress indicators, as well as behavioral stress tests.

Improve feed conversion rates

Research shows that broilers raised under green light consume less feed per pound than those grown under traditional blue-enriched white LED systems. With a .028% increase in feed conversion, it will not take long for you to experience a ROI.

Increase bird weight

Green light encourages growth and sexual development of poultry during the early stages of life by enhancing proliferation of skeletal muscle satellite cells, while blue light elevates plasma androgens allowing the bird to put on more muscle mass at later stages of development.

A recent USDA study found that broilers raised under ONCE® lighting systems outperformed when compared to other LED lamps. The broilers tested under our system showed a 3-5% increase in body weight.

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 an optimal solution that addresses your flocks' needs. When supplied with the right tools, you'll have birds that are less prone to flight, notably less aggressive and consequently put more feed energy into just growing.

Photopic Spectral Response Graph

