ONCE® Products Specifically Designed for Layers and Breeders

AgriShift® TLL
The AgriShift® TLL tube light provides egg producers and breeders with an in-system lighting solution that meets the needs of today's modern poultry houses. Made with Dim-to-Red® technology and a Build For Your Barn® design, the AgriShift® TLL provides a more uniform and continuous light pattern, leaving birds noticeably less stressed and calmer. Available in 24” 1 or 2 tube assemblies, with various cord lengths.

AgriShift® JLL
The AgriShift® JLL is an 8 Watt LED with two formats allowing for multiple applications—JLL Tall is best suited for enachable and traditional houses, JLL Short is best suited for aviary and cage-free applications. The AgriShift® JLL is designed with Dim-to-Red® technology and Build For Your Barn® construction. Mounts easily to a standard 4 inch junction box with screws included. (Both tall and short lens version.)

AgriShift® MLM-R
The AgriShift® MLM-R is an 8 Watt fixture made specifically for layer and breeder operations. The optimized Dim-to-Red® light spectrum simulates sunrise and sunset, calming the flock, reducing injury and decreasing time to peak production by stimulating ovulation through the release of reproduction stimulating hormones.

AgriShift® EL
The AgriShift® EL is a 3 Watt for layer houses that includes a conduit mount with Dim-to-Red® technology and a Built For Your Barn® design. It mounts easily into a 1/2 inch PVC conduit box (included).

AgriShift® Master Controller
The AgriShift® Master Controller is used for dimming and controlling lights in commercial agriculture applications. The integrated controller is easily controlled manually by the front panel, remotely with a 0-10VDC control signal—standard with most barn controllers, or as a stand alone programmable controller.

AgriShift® Slave Dimmer
The AgriShift® Slave Dimmer provides smooth dimming of any AgriShift® light. It is easily controlled manually with the front panel controls or remotely with a 0-10VDC control signal—standard with most barn controllers. The dual output channels allow control of more lights at higher power levels.

ONCE® Products Specifically Designed for Pullets

AgriShift® MLM-B
The AgriShift® MLM-B is an 8 Watt fixture designed for pullet facilities with Dim-to-Blue® technology and a Built For Your Barn® structure. It has an optimized color spectrum and dimming capability in order to meet the birds’ developmental needs.

AgriShift® TLP
The AgriShift® TLP in-system tube light is designed specifically for today’s deeper and more spacious Pullet systems. Designed with Dim-to-Blue® technology and a Built For Your Barn® structure, the AgriShift® TLP enhances animal welfare and improves bird uniformity. Available with various cord lengths.

AgriShift® JLP
The AgriShift® JLP is an 8 Watt LED created as a retrofit solution for modern Pullet confinement systems. It has an optimized color spectrum and Dim-to-Blue® technology dimming capability in order to meet the birds’ developmental needs, enhance welfare and provide uniform growth.

CONTACT OUR TEAM
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The Importance of Light Color in Poultry Vision
Light is a key environmental factor that influences and directs physiological and biological processes in all animals. Raising animals in indoor facilities requires specialized lighting systems to achieve optimum results in both production and animal welfare. Artificial lighting programs in layer, breeder and pullet barns can be a useful tool to enhance productivity and manipulate the environment to influence certain responses. New developments in LED lighting systems can now provide customized light intensity, spectrum and photoperiod control for poultry-specific environments. However, artificial lighting programs must be applied with a thorough understanding of the animal's physiological response to light and the significance of the different characteristics of light incorporated in such lighting programs.

ONCE® Layer and Breeder specific lights are designed as a deeply red saturated light with added blue and green spectrum (for vision). The red spectrum stimulates a hen's hypothalamic and pineal oscillators, helping to maintain circadian rhythms and promote sexual maturity. It also stimulates the release of two reproduction regulating hormones essential for sexual maturation and daily egg production. ONCE® Pullet specific lightings systems use a green light which increases growth during the early stages of development by enhancing proliferation of skeletal muscle satellite cells, which repair and build muscle. Blue light is helpful in the growth and sexual development of poultry at a later age by elevation of plasma androgens, allowing the bird to put on more muscle mass. Studies have also show that blue light can calm birds, reduce blood pressure and positively affect glucose and triglyceride levels. Combined green and blue light promotes myofiber growth due to more effective stimulation of testosterone secretion.

How Poultry Sees
The graphs to the right show the typical color sensitivity of a human eye compared to the sensitivity of a typical chicken eye. In the Human Eye Spectrum the smooth white line curve and large hill in the center of the curve is showing that humans see green and yellow colors better than they see blue and red. In the Domestic Fowl Spectrum you can see there are 4 (four) distinct color peaks. The highest sensitivity are to green, blue and red light but you can see another one in the UV spectrum (far left bump on the curve).

The Science Behind the Technology

Benefits of ONCE® Lighting Systems

Productivity Enhancement
With Dim-to-Red® AgriShift® lighting, providing natural daylight simulation for improved productivity is easily achieved. The Dim-to-Red® light spectrum decreases time to peak production by stimulating ovulation via the release of reproduction stimulating hormones. Sunrise and sunset simulation eliminates the stress inputs of switching lights on and off abruptly. This helps reduce overall stress in the flock which lowers mortality and supports immune response. Research and on-farm testing with AgriShift® LED systems have shown immediate changes in bird behavior, increased performance, and lower overall stress indicators.

Energy Savings
AgriShift® products are more energy efficient than fluorescent and incandescent lighting. Switching from incandescent lighting to LED lighting with dimming can save from 75 to 85% of your lighting electricity costs. Switching from compact fluorescent lamps (CFLs) to ONCE® LED lighting products saves from 45 to 50%. In most situations, the financial payback period of an LED investment is between 1 and 2 years.

Animal Welfare
Reducing stress improves animal livability and performance. ONCE® AgriShift® LED fixtures, lighting programs and systems are directed toward minimizing extreme changes in lighting. Abrupt changes are shown to excite flight responses, increasing cortical levels and inhibit melatonin secretion—both of which have a negative effect on the well-being of the bird. By offering LED fixtures that present uniform coverage and a consistent light, as well as the ability to provide sunset and sunrise functionality, corticosterone levels and other stress markers are minimized.

Warranty
Longevity is guaranteed with ONCE® LED lighting products. A 50,000 hour lifetime is backed by a 5 year (24/7) replacement warranty.

Newly Released Products and Accessories!

**AgriShift® MLST**
The AgriShift® MLST is a stringer made to fit any ONCE® ML lighting fixture and is specifically designed to make existing aisle lighting installations easier. It comes in either 8 or 10 foot sections and easily attaches to the ceiling of any barn.

**AgriShift® TLUS**
The AgriShift® TLUS under-system tube light, runs perpendicular in system, provides layer producers a lighting solution that is designed to brighten underneath cages, which significantly reduces floor eggs. Available in stringer format.

**AgriShift® TUS**
The AgriShift® TUS tube light runs perpendicular in-system, providing poultry producers with a lighting solution that has a more uniform and continuous light pattern free of dark spots and shadows. Available in stringer format.
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Animal-Centric Lighting Systems for Layers, Breeders and Pullets

- Promotes Animal Welfare
- Out-performs generic LED lighting
- Optimizes production efficiency
- Reduces energy costs