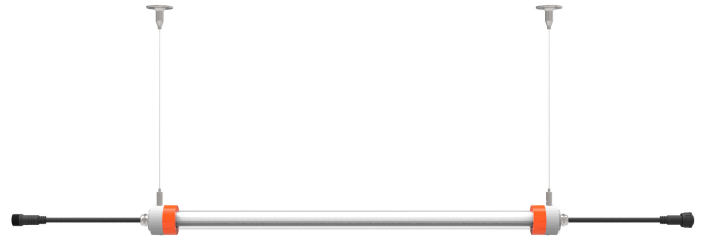


Poultry Farm LED Tube-Top Triac Dimmable

-Chicken Farm Application-



Ceiling Installation



Suspending Installation



Full Spectrum/2700-5500K Dimmable LED tube	
Full Spectrum LED Poultry Lighting For Broilers and Pullets	<p>Composed of red&blue&green color,good for chickens' growth.</p> <p>Simulate the sunlight for chickens.</p> <p>Red Color:Stimulate sexual maturity and egg production.</p> <p>Blue & Red Color:Keep chickens calmer, prevent pecking damage, promote myofiber growth and improve feed conversion.</p>
2700-3000K LED Poultry Lighting for Layers and Breeders	<p>Composed of sufficient red color, which help increase egg input and quality.</p>
5000-5500K LED Poultry Lighting for Broilers and Turkey	<p>Enhances proliferation of skeletal muscle satellite cell, improves feed conversion and meat production.</p>

Our Research on Chicken's Eyes



As chicken see more of the visible light spectrum than human, the poultry lighting spectrum should be different from the commercial lighting. The Poultry light is composed of red, blue and green color in one light, which can help chickens grow healthy and induce feed conversion to egg production.

➤ **Poultry Lighting; White Color:**

The “white” visible light launched naturally by both sun and artificial light sources are actually comprised of numerous colors, actually composed of a range of colors, red, green and blue color. It is available from 2700K to 6500K. According to the research , pullets may be reared with warm or cool lights, but laying hens should have lights with a sufficient red spectrum (2700K–3000K)

➤ **Chicken Lighting; Red Color:**

In poultry, red light is vital for stimulating sexual maturity and egg production. Chickens exposed to red light versus blue, green or white light consistently have higher egg production than the other color groups. Red light is able to to 38 eggs per hen, while potentially decreasing food consumption by up to 20%.

➤ **Dimmable LED Lighting; Blue Light:**

Blue light increases growth at a later age by elevating plasma androgens and keeps chickens calmer which improves feed conversion.

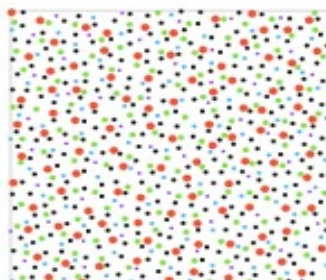
➤ **LED chicken light; Blue and Green light:**

Green and blue light promote myofiber growth lead to more effective stimulation of testosterone secretion and improved feed conversion.

HYPERUNIFORMITY IN CHICKEN EYES

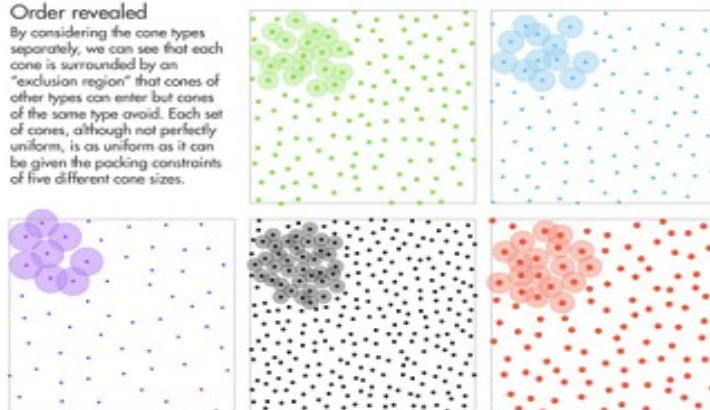
Apparent disorder

The colored dots below correspond to the arrangement of green, blue, red, violet and double-type (black) cone photoreceptors in a chicken's retina. Each cone is a different size. At first glance, the distribution appears to be disordered.

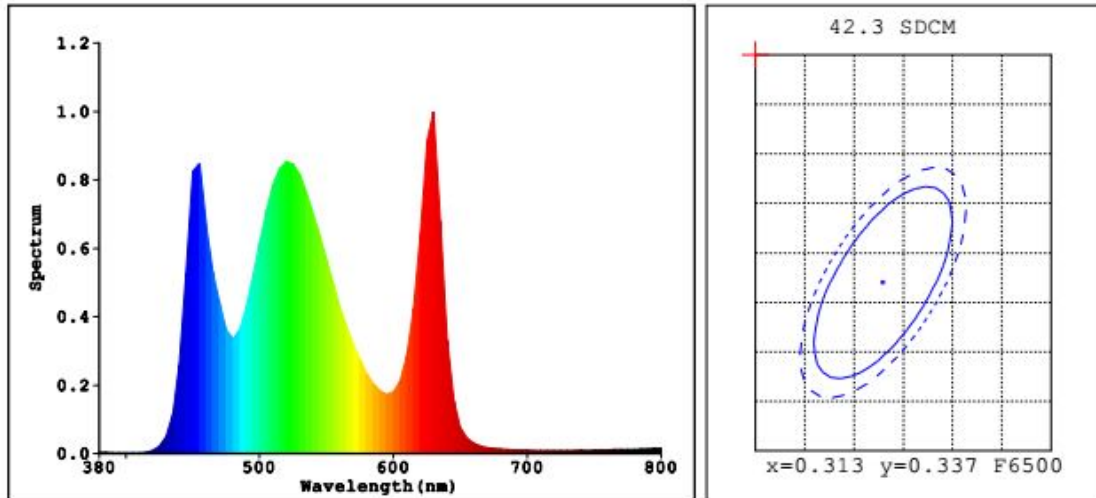


Order revealed

By considering the cone types separately, we can see that each cone is surrounded by an “exclusion region” that cones of other types can enter but cones of the same type avoid. Each set of cones, although not perfectly uniform, is as uniform as it can be given the packing constraints of five different cone sizes.



Full Spectrum Dimmable LED Tube-Integrating Sphere Test



Color Parameters:

Chromaticity Coordinate: $x=0.2938$ $y=0.3796/u'=0.1687$ $v'=0.4903$
 Tc=6986K Dominant WL:Ld=508.0nm Purity=12.1% Centroid WL:529.0nm
 Ratio:R=15.2% G=79.2% B=5.6% Peak WL:Lp=630.0nm HWL:20.8nm
 Render Index:Ra=87.4
 R1 =89 R2 =86 R3 =89 R4 =91 R5 =89 R6 =84 R7 =87
 R8 =84 R9 =66 R10=75 R11=81 R12=60 R13=82 R14=94 R15=90

Photo Parameters:

Flux: 2268.3 lm Fe: 7.0345 W Efficacy:100.2 lm/W
 LEVEL: WHITE:OUT

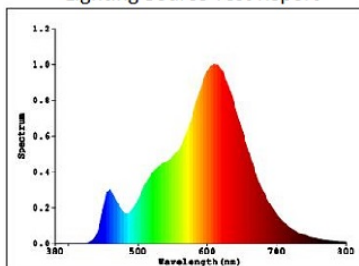
Electrical Parameters:

Luminaire: U=231.8V I=0.09952A P=22.64W PF=0.9816

Instrument Status:

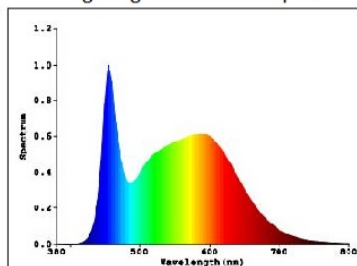
Scan Range:380.0nm-800.0nm Interval:5.0nm[0] Ip=41419 (G=4, D=50)
 REF=12885 (R=3) $\theta=-0.172^\circ$ PMT: 23.9 centigrade [24.9]

2700k
Lighting Source Test Report



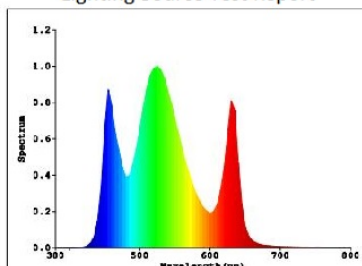
Better for Layers and Breeders

5000K
Lighting Source Test Report



Better for Broilers

Full Colour Spectrum
Lighting Source Test Report



Best color for Broilers and Pullets

Applications



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