

# **Proposal for Broiler House**

## **LED Bulb Light**





#### www.dlux-led.com

Lighting Solution For Broiler Farm Project

#### 1. Poultry farm introduction

- Farm dimension: 150m x 16m- Farm Type: Broiler house

#### 2. Suggested LED Poultry Light and Dimming Controller

- -> IP67 DLP19 Dimmable Flicker Free 10W LED Bulb 220Vac in 5000K
- -> DLUX Programmable Dimmer 3L 3000W

#### A: Total quantity bulbs for each house: Bulb Distance 3m

Total 196pcs(4row\*49pcs) LED bulbs in one house

Product picture	Model number	Details
	DLPQPF10WS/ DLP19 5000K	1) Wattage: 10W 2) Voltage: 180-260Vac Flicker free 0Hz 2) Efficiency: 92%, PF: 0.96 3) LED bulb, OD80mm 4) IP Grade: IP67 for DLP19 connector. 5) Dim: Dimming from 0-100%, lighting brightness from 1 to 100% 6) Certificate: TUV, SAA, SASO, CE, ROHS

Product picture/ Drawing	Model number	Base	Details
c c c c	DLPCA01	DLP19 connector	1) Rubber cable Waterproof IP67 2) Fire proof 3) Base DLP19 , 16AWG 4) Total 150m cable with 49pcs connector

Product picture	Model Number	Wattage/Voltage	Details
	DLUX Programmable 3L Dimmer & Timer together	3000W 180-240Vac	1) Dimming from 0-100%, lighting brightness from 1 to 100% 2) Manual light on/off 3) DIY lighting program,24 hours/days lighting program control 4) Setting of days, groups, light on/off time, light intensity, manual/auto control 5) With 0-10V signal 6) 1 channel out

Product Picture	Model Number	Details
	DLPCA03	1) Extension Cable to connect the first Bulb to Dimmer 2) 15m Extension cable 2*1.0mm2 3) Rubber Cable in waterproof and fireproof



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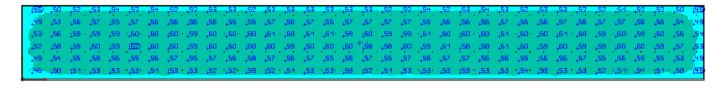
#### 3. Lighting quantity for 1 broiler house

Products	Description	Quantities (PCS)
IP67 LED bulb DLHT19 base	10W	196
DLUX Programmable Dimmer 3L	3000W	1
DLP19 cable	Total 150m length  3M light distance with 49pcs connectors	4
Extension cable with female & Male connector	10m cable for connecting the first tube to the Dimmer	1
Extension cable with female & Male connector	12m cable for connecting the first tube to the Dimmer	1
Extension cable with female & Male connector	15m cable for connecting the first tube to the Dimmer	1
Extension cable with female & Male connector	18m cable for connecting the first tube to the Dimmer	1
Junction Box	IP67 Junction box 1 in 2out	2

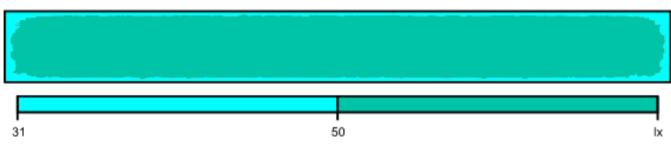
#### 4. Simulation in Dialux for Broiler farm

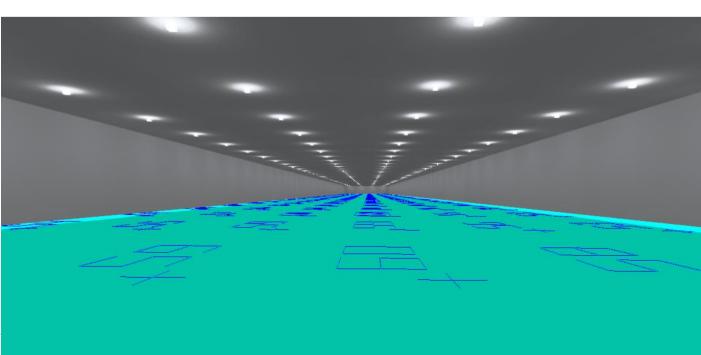
Lux On the Ground Perpendicular illuminance (Surface)

Mean (actual): 55.4 lx, Min: 32.2 lx, Max:62.4lx, Min/average: 0.58, Min/max: 0.52



#### False colors [lx]







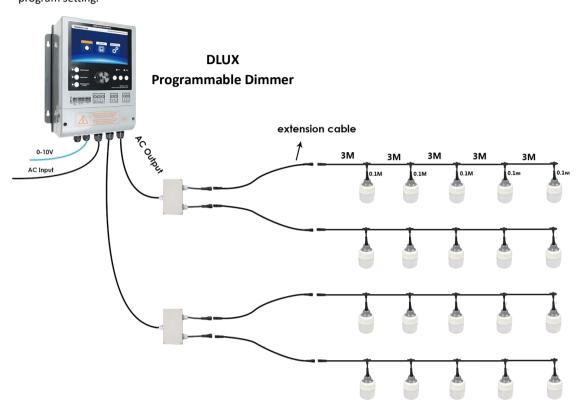
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#### 5. Connection & installation

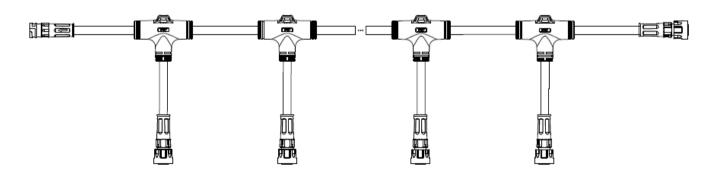
1 Broiler house total need 196pcs LED bulbs, total 3 line IP67 DLP19 LED Bulbs.

DLUX Programmable Dimmer 3L 3000W control 196pcs LED bulbs total. LED bulbs can be dim from 1% to 100% to adjust the LUX on the

Controlling by the dimmer, farmer can set up its lighting program then the bulbs will Auto-change the brightness based on the lighting program setting.

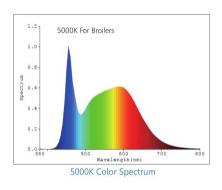


#### **DLP19 Cable**





#### 6. Suggested Color Temperature For Broiler





5000K Day Light Color

Why 5000K is the suggested color temperature for broiler?

Red color increase food intake, reduces the feather pecking of chick.

Blue color decrease movement when catching the chicken, make it not frightened then improve the quality of chicken meat.

Green Color increases growth rate at an early age by enhancing proliferation of skeletal muscle satellite cells.

LED chips 5000K can help chicken gain more weight.

#### 7. Lighting project



Gemany Chicken Farm
Farm Size: 60m\*16m Color Switchable LED Lights: 50pcs



Australia Chicken Farm
Farm Size: 148m\*28m T12 LED Lights: 132pcs(3\*44)



Australia Chicken Farm Farm Size: 130m\*15m T12 LED Lights: 96pcs(3\*32)



Saudi Arabia Chicken Farm Farm Size: 120m\*80m T12 LED Lights: 680pcs



Poland Chicken Farm Farm Size: 120m\*14m T8 LED Lights: 90pcs(3\*30)



Ukraine Chicken Farm Farm Size: 80m\*12m T12 LED Lights: 96pcs(3\*32)



Saudi Arabia Breeder Farm



Korea Broiler Farm



South Africa Cage Chicken Farm