

LED Lighting in Poultry Barns

Conventional Lighting

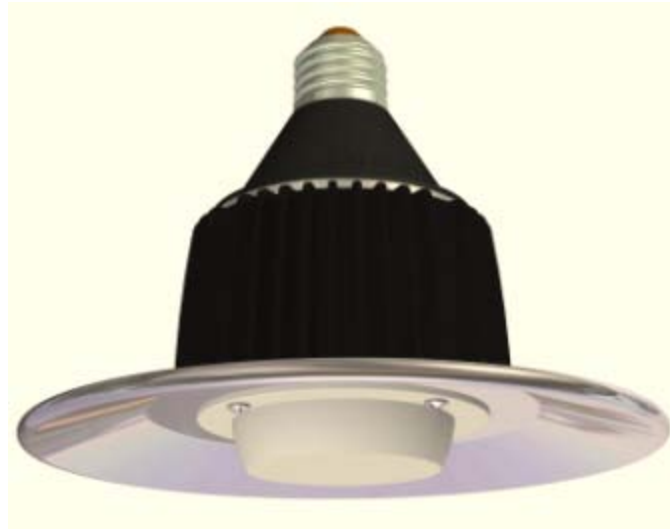


Problems with Conventional lighting

- Not Dimmable
- Ballasts life shortened with light schedules
- Not suitable to wet locations
- Not efficient
- Light quality poor-----"flicker"

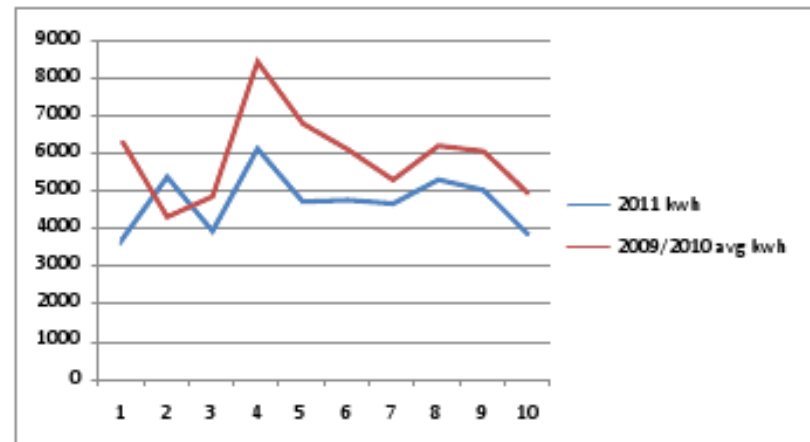
LED lighting

Once Innovations Agri-shift PL
12w replacement for 100w incandescent



Kwh before and after LED installation of 48 LEDs replacing 48 100 w incandescents

Month	2009	2010	2011 avg 09-10	
Jan	5000	7631	3706	6315.5
Feb	2852	5755	5366	4303.5
Mar	4633	5052	3926	4842.5
Apr	7315	9525	6112	8420
May	7157	6404	4708	6780.5
June	6068	6108	4752	6088
Jul	5040	5528	4657	5284
Aug	5588	6795	5290	6191.5
Sep	5315	6774	5015	6044.5
Oct	5362	4459	3817	4910.5
Nov	6961	5635	0	6298
Dec	6367	5272	0	5819.5

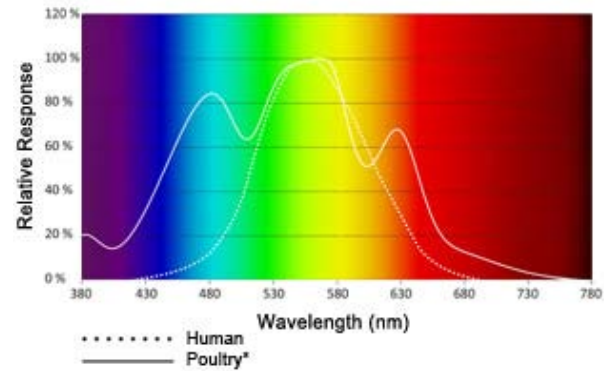


Economics

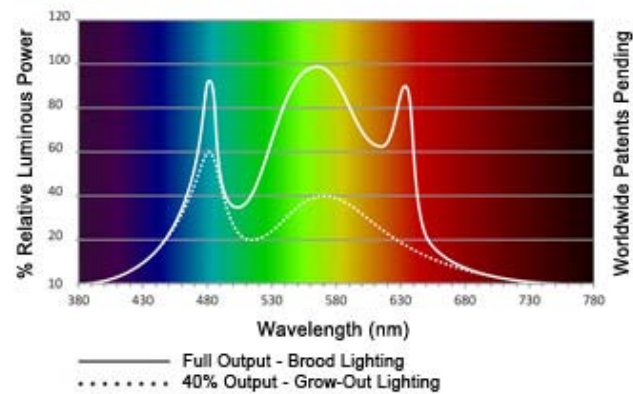
- Saving roughly 1200 KW/month (\$120/month)
- Payback in 2 years (48 fixtures at \$50ea)
- Fixture price is now around \$30 without rebates.

Other benefits????

Human and Poultry Spectral Sensitivity



AgriShift® MLB Spectral Output, Brood and Grow



- Less “flicker” equals calmer birds?
- Dimmable to blue spectrum.....birds can still see in a lower light level
- Increased egg production in the blue or red spectrum????





