

- For new construction or fluorescent troffer retrofits
- 0-10 VDC Dimmable
- 5 Year Warranty
- No more ballasts!
- Multiple sizes and color temperatures



## Product Specifications

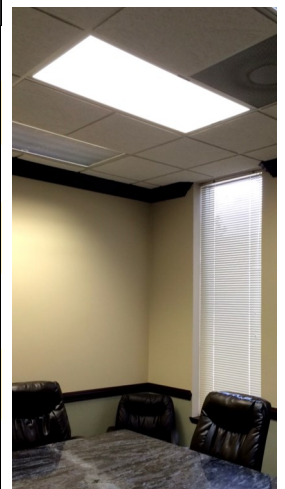
FOS LED Flat Panels deliver high lumen output (up to 91 lumens per watt) with exceptional 82+ CRI color rendering. The panels are constructed of high grade aluminum backing for maximum heat dissipation and a Samsung light-guide/diffuser with >80% light delivery.

Dimming is achieved via a 0-10VDC signal connection that may be integrated with compatible wall dimmers or other light control systems. IES and LM79 reports are available upon request.

Install via direct replacement of existing fluorescent troffers in drop ceilings, or with an optional surface mount or suspended mount kit.

## Performance Specifications

Model (FOS-PNL-)	14-40W- xx	14-50W- xx	22-40W- xx	22-55W- xx	24-50W- xx	24-63W- xx
<b>Input Voltage</b>	Universal 100-277 VAC, 50/60 Hz (0-10VDC Dimming included)					
<b>Power</b>	40 Watts	50 Watts	40 Watts	55 Watts	50 Watts	63 Watts
<b>Size</b>	1' x 4'		2' x 2'		2' x 4'	
<b>Delivered Light</b>	3,480 lm	4,377 lm	3,600 lm	4,900 lm	4,600 lm	5,496 lm
<b>Lumen Efficacy</b>	87 LPW	87 LPW	90 LPW	90 LPW	91 LPW	87 LPW
<b>Lifetime/Warranty</b>	L70 > 50,000 hrs, 5 Year Warranty					
<b>Color Temperature</b>	xx=40 for 4,000K / xx=50 for 5,000K					



### LED Panels vs. Fluorescent Troffers:

While fluorescent tube lights have reduced energy consumption for commercial and retail applications, the massive growth and improvement in LED lighting technology will no doubt soon make fluorescent lighting obsolete. In this short analysis, we will look at some general energy and electricity comparisons for a typical fluorescent light fixture as compared to our FOS-2x4-50Watt LED light panel.



	<i>Fluorescent Fixture</i>	<i>LED Panel</i>
<b>Components</b>	<i>Tubes, Troffer, Ballast, Diffuser, Starter</i>	<i>LED Panel, Power Supply</i>
<b>Lifetime</b>	<i>20,000 hours</i>	<i>50,000 hours</i>
<b>Dimmable?</b>	<i>NO</i>	<i>YES</i>
<b>CRI</b>	<i>70-90</i>	<i>&gt;80</i>
<b>Mercury?</b>	<i>Yes</i>	<i>No</i>
<b>Light Output</b>	<i>Heavy losses</i>	<i>Directed output</i>
<b>Lighting Heat Load Savings</b>		<i>2.7X</i>

### Installation:

A fluorescent light troffer is typically installed as a recessed light fixture in retail space applications. No extra installation efforts are required to install an LED light panel. In fact, there are less wiring and installation steps necessary!

Fluorescent performance depends on many factors including the type of starter used as well as the amount of time between restarts. Because light output of a fluorescent bulb is omnidirectional, roughly 33% of the total rated lumens output ever reaches its target. In addition to the electrical savings, LED lighting typically offers a 2.7X reduction in heat load as compared to fluorescent lighting.



### Savings:

So what's the bottom line? Based on the difference between purchasing a new fluorescent troffer versus an LED Panel, expect to save between \$24-\$35 dollars per fixture per year. Additional air conditioning savings will also be realized due to reduced lighting heat loads. Add dimming to the LED panels and you can further increase electricity savings by another 30-50%.

Higher CRI LED lighting has also been shown to increase productivity in workplaces compared to fluorescent lighting.



<i>Fluorescent Troffer</i>	<i>LED Panel</i>
<b>152 Watts</b>	<b>56 Watts</b>
<b>\$24-\$35 / year Savings Per Fixture</b>	