



Effect of Enercon Lighting Controllers On Lamp Life And Brightness

Enercon International's energy saving lighting controllers often inspire questions relating to effects on lamp and fixture life, and about effects on light output.

Lamp and Fixture Life

Simply put, any electrical device drawing less current and at lowered voltage will produce less heat. Less heat in a lighting bulb, ballast or fixture translates into less degeneration of components over time: again simply...longer life.

Light Output

Because the Enercon lighting controllers do not merely reduce voltage to a lighting circuit by reducing the voltage waveform, but do so by a more technically sophisticated process of waveform "notching," the total voltage (RMS voltage) is reduced substantially more than peak voltage. This means that there is not a one-to-one relationship between energy cost savings and light output. In fact, depending upon the type, age and condition of the treated fixtures, light output will be reduced by only one fifth to one third of the level of savings achieved.

Yes, these products do indeed "dim" your lights. Please read on before deciding this is a "bad" or undesirable effect.

Key Fact

Your Lights Get Dimmer Over Time Anyway!

Your lights are dimmer today than they were yesterday. And, they will be dimmer tomorrow than they are today. In fact, as your lights approach the halfway point in their expected lamp life, they will only produce about 60% of the light they did when they were brand new.

Yes, an Enercon lighting controller set to achieve 20% cost savings will initially dim your lights about 2% to 5% from their previous output. However, over time, the average light output from your lights will actually be greater using our products than without them, from 10% to 30% greater, over the final 50% of the fixture's actual service life.

Investing Light To Gain Light

In effect, you are investing a little of your present light output in order to enjoy greater light output, for a longer period of time in the future.

With new or nearly new fixtures, using one of our lighting controllers set to a modest 30% savings level, the life of the bulbs can be expected to be extended by 40% to 80%. This means



that a bulb with a typical lamp life of 20,000 hours should last from 28,000 to 36,000 hours, when treated by one of our lighting controllers.

The trend for light output reduction will be extended forward by this same amount of time, as well. This means that you will have the light output you would normally lose at 10,000 hours still being produced at 14,000 to 18,000 hours. The lamps will lose output at a much slower rate than if they were not treated by our controllers.

Your initial willingness to invest 5% to 10% of your light output will quickly begin paying you back with even brighter light than you would have had without the Enercon lighting controller treatment, giving you as much as from one to three years of additional usable light output from the same bulbs.

That's not a bad return on your "light" investment.

You Pay The Same For Aging, Dimmer Lights

Regardless of the age or light output of a fluorescent or HID lamp, the electricity consumed remains constant. A two year old 250 watt light bulb will still consume 250 watts of electricity. However, it may be only producing 50% of its initial light output.

Our Enercon lighting controllers instantly reduce the electricity usage of your lights by as much as 40%. And, this savings remains constant for the entire life of the bulbs, the life of the replacement bulbs, the life of the bulbs that replace those bulbs, and so forth, for decades into the future.

Whenever you replace an aged bulb with a new one, your Enercon lighting investment will begin paying off all over again...causing a modest initial light output reduction, then quickly reaching a point where the lamp output is greater than it would have been without our treatment, so that the average light output over the service life of the bulbs will be greater with the Enercon controllers than without them.

With Enercon, you get more light, for less money, for a longer period of time.