

Be Off The Grid com Inc.

Commercial LED Lighting Supplier

8 Reasons To Consider LED Replacement Bulbs vs. T8 Fluorescent Bulbs

For over the past 10 years we have been touting the benefits of T8 lighting. T8 has been one of the cheapest options out there for high bay and office lighting retrofits. LED technology has just been too expensive to purchase and installation was a significant cost as well.

New T8 Hybrid LEDs

We are introducing our new LED T8 Lighting (Ballast compatible or Direct Wire) Hybrid tube light. We will offer LED Replacement Bulb (4' tube and 2' tube) that replaces existing T8 bulbs in existing T8 fluorescent fixtures. It's a direct replacement meaning you don't have to change out the ballast or provide an additional power source. Unlike other ballast compatible LED tubes, our Hybrid LED tubes can be used with or without the existing ballasts.

The Be Off The Grid com Inc. LED Replacement Bulbs are:

- **A DIRECT Replacement for existing T8 Fixtures or can use the existing T8 fixtures without a ballast with rewiring**
- **Does not affect the original UL listing for the T8 Fixture**
- **Carry a REAL, 5 Year Warranty - DLC - UL - CE - RoHS Certified**

1. LED Replacement Bulbs are 30% More Efficient

So not only do you get more light from a LED replacement bulb, they use less wattage. Our LED replacement bulbs only use 18 watts vs 32-40 watts with T8 making the LED > 30% more efficient.

2. LED Is A Directional Light Source

The LED replacement bulbs emits light at a ~110 degree pattern vs the 360 degree pattern given off by T8 fluorescent bulbs. In this case, only 30% of the light given off by the T8 fluorescent is actually hitting the intended target. This means you are not using all available light because the fluorescent bulb is also lighting the fixture. That's why fluorescent fixtures are brighter with reflectors.

3. LED Transfer Light vs. Heat

A LED fixture uses its energy to produce light. Most lighting sources including fluorescent use heat to generate light which is why traditional incandescent, metal halide and fluorescent are losing favor with property owners.

4. LED Still Give Off Light At End-Of-Life

A fluorescent bulb at the end of its life is very simple to spot, because it is DEAD, nothing left. A T8 bulb is considered end-of-life at 60% of its light output, which equates to roughly 14,400 hours. LED replacement bulbs on the other hand, calculate the end of life at 70% which is approximately 50,000 hours. In order to keep up with LED, you will have to replace the T8 bulbs 3.5 times

5. LED Replacement Bulbs Have No Mercury

One of the most important differences lies in the fact that there is no Mercury or Glass Content with LED lighting. In the State of Washington alone, over 10 Million lamps are disposed of in landfills each year. Those 10 Million lamps hold roughly 400 lbs of toxic Mercury waste that gets deposited each year. Washington State estimates that only 2 out of 10 bulbs are effectively recycled.

6. LED Does Not Give Off UV

LED replacement bulbs does not emit any light in the non-visible light spectrum (UV). UV/IR light causes colors to fade in fabrics, signage, while also being the leading cause for eye strain and eye fatigue. Fluorescent T8 bulbs emit UV/IR light.

7. LED Makes Air Conditioning More Efficient

LED fixtures contribute little to none in regards to heat gain in a room or air conditioned space. The LED generate less heat. Less heat means that the Air Conditioning system does not have to work as hard. This is vitally important if you are doing a new build or upgrade as you may be able to utilize smaller A/C systems to heat the same area.

8. LED Provides 70% More Light

The beam angle of the LED replacement bulb is ~110 degrees. This means that all of the light generated by the LED bulb is focused in the 110 degree area. The T8 bulb on the other has a beam angle of 360 degrees. That means the majority of the light generated by the T8 bulb is going out the sides and top of bulb, which does not benefit the intended target.

If you have interest and or questions on our HYBRID LED Tubes or our other commercial LED products, please visit our website:

www.beoffthegrid.com