



S3J Electronics LLC

Producers of Advanced Lighting

2000 Commerce Pkwy Lancaster, NY 14086 (716)206.1309 fax (716)685.6213

Reasons to go with LED

- 1) LED technology uses anywhere from 90% less energy when replacing incandescent products. LED technology can use about 65% to 75% less energy than certain HID technologies like High Pressure Sodium and Metal Halide. LED technology can use 45% to 75% less energy than fluorescent technologies.
- 2) LED technology does not need to use lighting ballasts. Lighting ballast is a piece of equipment required to control the starting and operating voltages of electrical gas discharge lights. Examples of gas discharge light sources include fluorescent and neon lights and high-intensity discharge (HID) lamps. Ballast, both electromagnetic and electrical draws additional power on the fixture, and produce additional heat. Since LED technology doesn't use lighting ballasts it draws a consistently low energy, does not produce additional heat, and doesn't have an additional part to make the light fail.
- 3) LED technology produces very little heat. Incandescent and HID technology will have 80% of their total energy draw as a heat bi-product. LED technology only has 5% as a heat bi-product of their total energy draw. If the energy draw is already 65% to 75% lower than traditional HID Technology, and out of that much lower energy draw you only have 5% as a heat bi-product; you have a product you can touch with your bare-hands. Not to mention, you can expect substantial saving on cooling and air conditioning.
- 4) LED technology is shock-proof. The diodes themselves are very resilient to abuse. You can expect fewer problems in shipping, and you can put an LED fixture in high abuse areas without replacing.
- 5) LED technology has a very long lifetime. The individual LED has a rated lifetime of 50,000 hours until you will see only 30% lumen reduction. By the time the LED hit's 80,000 to 100,000 hours of lifetime you are looking at about 50% lumen reduction. To put that in perspective, if you left your lights on 24/7, they would last for 12 years at 100,000 hours (a rough half-life). Here is what separates our LED's from the competitors in lifetime. Traditionally, the power supply for LED lights will only last about 50,000 hours. S3J Electronics have managed to create a power supply that will last 80,000 to 100,000 hours. We do not use Electrolytic capacitors on some of our products, which are what usually restrains the lifetime of a power supply.
- 6) Most of our LED light bulbs are dimmable. However, this dim ability will reduce the lifetime of the LED's by about 5,000 hours.
- 7) LED technology can be used with photocell, or motion sensor.
- 8) Some of our products with the new power supplies will have LM-79 and UL approval. These products with LM-79 and UL approval are also considered to be made in the U.S.A.
- 9) LED's will not fail between -40 degrees Fahrenheit and 170 degrees Fahrenheit. Induction, Fluorescent, and HID lighting are much more susceptible to fail in higher wind and heat conditions. You can also expect a decrease in life and lumens, when fluorescent, HID, and Induction are subject to cold conditions. LED lighting thrives in cold weather