

---

## Breakthrough on World's Most Efficient LEDs

Monday, 09 August 2004

dramatically lower lighting costs ShareThis Buzz up! LED Lighting Fixtures of Morrisville, North Carolina, will announce today that it has made a technology breakthrough that will dramatically lower the cost of LEDs (light emitting diodes). Lower your energy costs with Led Lighting

CEO Neal Hunter told the Raleigh News and Observer that his company is developing a lamp that uses less energy than its current LED fixtures but emits the same amount of light. He said a just-released federal study by the National Institute of Standards and Technology confirms that the product is the most efficient in the world.

It uses 5.8 watts of power, compared with 60 watts for an equally bright incandescent bulb. According to the National Institute report, the new fixture uses less than 9 percent of the energy consumed by common bulbs and less than 30 percent of that consumed by fluorescent lights. LLF's best existing product consumes 15 percent of the energy used by an incandescent bulb and 50 percent of that used by fluorescents.

Hunter said he hopes to debut the brighter and more efficient lamps by the end of 2008. The first buyers will likely be wholesale distributors, followed by consumers off store shelves by 2009. Semiconductor-based LEDs use much less power than traditional bulbs, don't contain mercury like fluorescents, and they last for years, sometimes even decades. Recent years have seen very exciting developments in this area, with Orlando, Ann Arbor, Detroit and Taiwan announcing switches of traffic lights to LEDs. This year's Rockefeller Center Christmas tree in New York will even be lit with the technology &mdash; strung along 5 miles of wire! LEDs have been around since the 1960s (think displays on alarm clocks or battery levels of video cameras), and greens and tech analysts have long predicted that the durable, cool-to-the-touch technology promises the future.

But so far the hardware has not been quite up to the task of producing high brightness at a reasonable cost. The Department of Energy has estimated that LEDs could reduce national energy consumption for lighting by 29% by 2025. That would save U.S. households \$125 billion on their electric bills. Hopefully, this announcement out of North Carolina signals a turn toward widespread adoption