



Aluminum heat sink dissipates heat from rear of lamp to prevent failure. Aluminum was chosen for its durability and heat distribution.

Glass dome ideal for vanity lights, table lamps, and globe chandeliers.

Standard screw base for Edison-style sockets. Microelectronics within the screw base allow the LED system to operate at 110 volts.

Optics designed to output uniform light. Wide and narrow beams available.

# Light Fantastic

**L**ED (light-emitting diode) lamps are starting to come on strong as a comparably efficient, long-lasting alternative to the current green leader, compact fluorescent lamps (CFLs), but without the mercury and subsequent disposal issues. And while some inherent challenges with color, heat, and consumer awareness have kept LEDs from reaching the residential mainstream, the benefits are promising and are driving intense R&D.

One of the coolest launches we've seen is a line of replacement LED lamps from Lighting Science Group. The six Edison-based lamps fit into traditional recessed cans and other sockets, and come in cool white as well as warm white, and in narrow- and wide-beam distributions. Aluminum fins, die-cast in a patented design, dissipate heat from the lamps.

The company says the new lamps are more efficient than incandescent, halogens, and CFLs,

and their life span is eight to 25 times longer than incandescents and halogens, and more than six times longer than CFLs.

The 6-watt R20, for example, puts out an estimated 325 lumens in warm white or 400 lumens in cool white. The company compares this to a 12-watt CFL that delivers 450 lumens; a 50-watt incandescent with 410 lumens; and a 46-watt halogen with 498 lumens. The R20 LED lamp will last for 50,000 hours compared to 2,000, 6,000, and 8,000 hours for the incandescent, halogen, and CFL, respectively.

Life span will be a key selling point for consumers, since the lamps carry a hefty price tag of \$30 to \$115, a range that the company expects will fall over time and with volume. The lamps will be available through the company's Web site, [www.lsgc.com](http://www.lsgc.com), as well as through electrical distributors and service companies. —Katy Tomasulo