

LUMILEDS™

LIGHT FROM SILICON VALLEY

PRESS CONTACTS:
Mindy Franklin 847/415-9328
Jason Ovitt 847/415-9326
mindy@sspr.com / jason@sspr.com

Luxeon® LEDs Signal 'Lights Out' to Bulbs in Vehicles

*Longer-Lasting, More Energy-Efficient and Now Bright
Enough for Complete Rear Vehicle Lighting System*

SAN JOSE, CA (August 17, 2004) --- The incandescent bulb is headed for extinction in rear vehicle lighting with high-power Luxeon LEDs from Lumileds Lighting that are bright enough to replace conventional bulbs on a one-for-one basis. Although LEDs began appearing a decade ago in center high-mount stop lamps, Luxeon LEDs are the first LED with sufficient power to light all rear vehicle applications including turn signals, tail lights, brake lights, and even rear fog lamps and back-up lights.

A technical revolution in automotive lighting is now underway. The use of Luxeon allows for increased safety, longevity, energy efficiency and modular packaging that makes it easier and more cost-effective to design- into a lighting system.

"The benefits that LEDs bring to automotive lighting simply are not possible with conventional illumination, and that's why vehicle manufacturers are making the transition away from incandescent bulbs," said Leonard Livschitz, Director of Automotive Business Development for Lumileds Lighting. "Luxeon does to the filament bulb what the bulb did to the gas lamp."

Life-Saving Technology

Because a Luxeon LED lights up more than 1 million times faster than an incandescent bulb, brake lights illuminate much faster and a driver can react more quickly and potentially avoid serious injury. At 60 miles per hour, stopping distance is increased by more than 25 feet, enough space to drastically reduce the speed of a collision or avert it all together.

In addition, a Luxeon LED is expected to last the life of a vehicle without needing to be replaced. Unlike a bulb, Luxeon is a durable, rugged light source that isn't affected by extreme cold, vibration or hard jolts. Without fragile filaments or glass to break, the light source will continue to function longer than most people keep their cars, resulting in fewer repair costs and time lost for owners, lower warranty costs for manufacturers, and safer vehicles on the road because turn, stop and tail lamps will remain reliably lit rather than breaking or burning out.

Luxeon is also energy efficient and contributes to reducing overall vehicle power consumption. A typical bulb-based rear lighting application will use approximately 20 Watts. A Luxeon based system will use 5-10 times less energy for the same application.

Not Just a Luxury

Luxeon LEDs are already on the road. In the Toyota Estima, for example, a single red emitter functions as the brake and tail lamp. No other single solid-state light source has proven powerful or reliable enough to meet stop-lamp specifications with just one LED.

LED lighting technology in automotive applications has been limited to the luxury makes. Because so many LEDs were required to generate enough light for rear vehicle applications, manufacturers could not afford to implement the technology broadly. Using a single Luxeon LED, lighting system costs are greatly reduced. Optic design can be simplified, packaging costs and space reduced and a modular implementation system can be executed across models and brands.

Visit Lumileds at Ceatec stand 8D15, on October 5-9, to see and learn more about Lumileds solid-state automotive lighting technology.

About Lumileds Lighting

Lumileds Lighting is the world's leading manufacturer of high-power LEDs and a pioneer in the use of solid-state lighting solutions for everyday purposes including automotive lighting, camera flash, LCD displays and televisions, portable lighting, projection and general lighting. The company's patented Luxeon Power Light Sources are the first to combine the brightness of conventional lighting with the small footprint, long life and other advantages of LEDs. Lumileds also supplies core

LED material and LED packaging, and manufactures billions of LEDs annually. Lumileds is headquartered in San Jose, California, with operations in the Netherlands, Japan and Malaysia and sales offices throughout the world. For more information, call Lumileds at 408-435-6111 or visit www.lumileds.com.