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Osram Golden Dragon and Dragonchain LED Modules Give Abominable Glare to Yeti's Stare

When Walt Disney World Resort previewed its newest Walt Disney's Animal Kingdom attraction, Expedition Everest, in New York's Time Square, it was determined to create a billboard spectacular that could stop even the toughest New Yorkers in their tracks.

The 57-story exteriors of two Times Square buildings were transformed into a snow-covered Mount Everest. A rumbling avalanche was added, as were flying acrobatic climbers and a hair-raising roar. Most importantly, the piercing "You lookin' at ME?" glare of the Yeti, fierce guardian of the

Himalayan Mountains, was brought to life by the glowing red eyes from Osram Sylvania and Osram Opto Semiconductors.

"The LEDs and LED system solutions are having a huge impact in the lighting world right now, particularly in situations that call for difficult configurations," said Michael Neary, senior applications engineer for LED systems at Osram Sylvania. "The combination of small size and components, and the versatility of extremely durable system shapes, has opened up illumination applications that make it possible to bring the Yeti to life. This would have

been impossible in the past."

To create the scary effect, Walt Disney Entertainment's Technical Director Larry Sonn applied LED system solutions and technology provided Osram Sylvania and Osram Opto Semiconductors. Sylvania offered its new, versatile Osram Dragonchain LED modules while Osram Opto Semiconductors provided the interior Golden Dragon LEDs.



Each of the Yeti's two 30 inch diameter eyes were back lit by six Osram Dragonchain LED Modules containing Osram Opto Semiconductors Golden Dragon LEDs. Specially designed for flexible illumination applications, the 9 foot modules were installed in concentric spirals in the base of each Yeti eye socket and covered by a red plastic lens.

"The superior intensity of the Golden Dragon LEDs is derived from Osram Opto Semiconductor's proprietary thin-film technology, and industry first in providing increased optical output

at the surface of the chip and increasing the usable light emitted," said Ellen Sizemore, director, LED and IR Products Group, Osram Opto Semiconductors. "The thin-film technology also allows for better optical coupling, lower forward voltages and improved thermal performance compared with conventional semiconductor chip construction."

The design goal also called for eyes that could dim, flash, and be clearly visible from 300 yards away. And, Disney Entertainment had limited room to mount a light source for the monster's eyes, which needed to stand out against the menacing backdrop and ferocious roar of the Yeti.

Each Dragonchain module featured 36 high brightness white LEDs, making the Yeti's glare clearly visible from over 300 yards away. Conformally coated to protect against moisture and condensation, each of the Yeti's dimmable eyes was controlled by six 23 V power supplies and six Osram Optotronic OT Dim modules per eye.

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