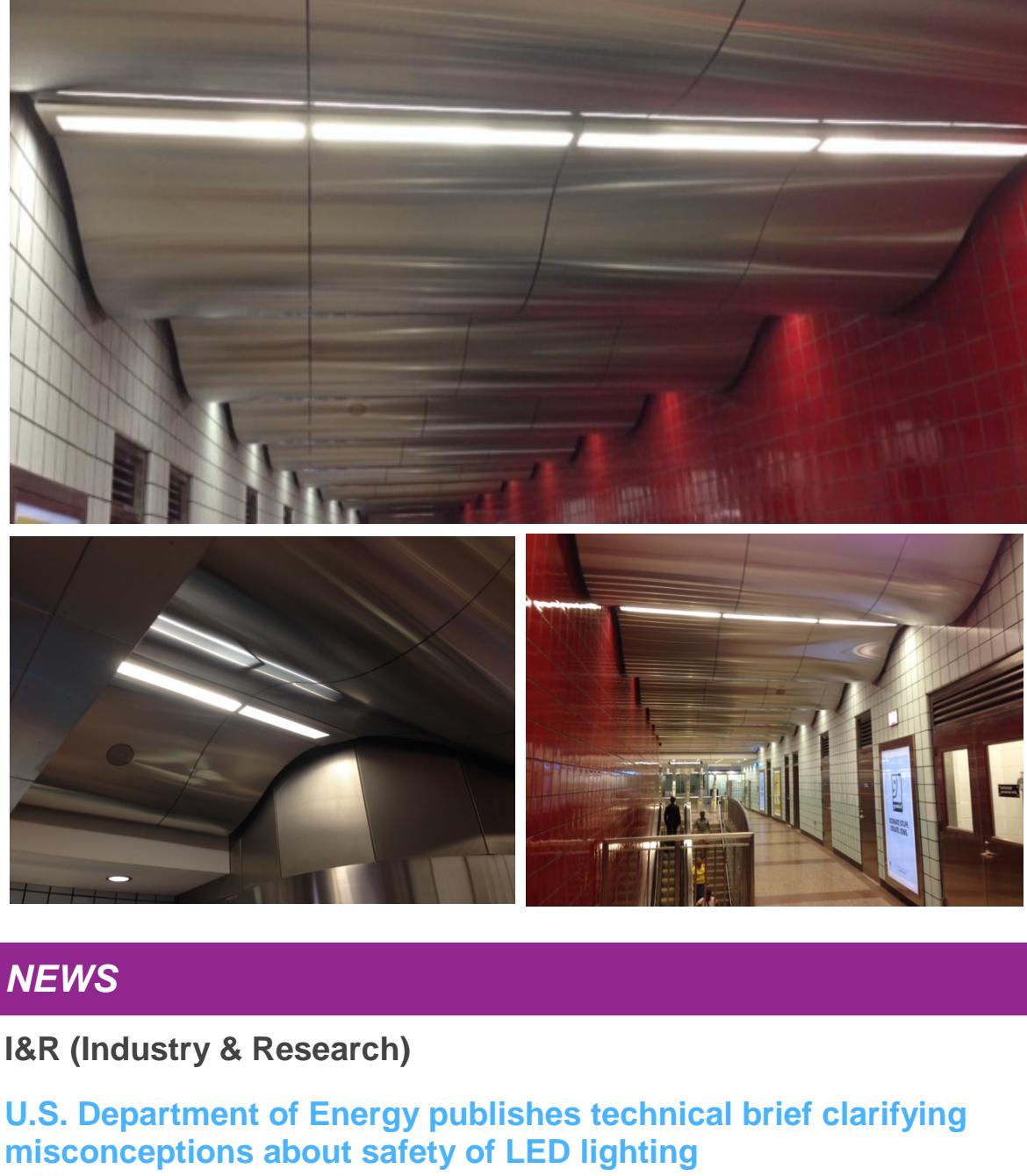


February 2014

**PROJECT SPOTLIGHT****Project:** [CTA Chicago](#) | **Agent:** [KSA Lighting](#)

Metalumen's completely custom brushed stainless steel wavy ceiling system was the ideal solution for our valued customer, CTA. This beautiful solution featured stainless steel wet location luminaires with gasketed double layer glass door assembly. A complete ceiling system and fixtures were installed in an area with curved walls and corners, where the ceiling panels and fixtures had to stop at an equal distance all around from the walls. The result was an outstanding lighting system that made sense in the space while achieving an epic architectural feel and function.

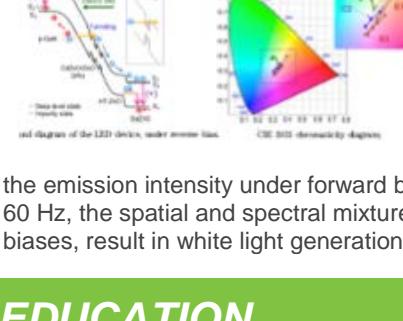
**NEWS****I&R (Industry & Research)****U.S. Department of Energy publishes technical brief clarifying misconceptions about safety of LED lighting**

The spectral emission of LEDs is a frequent subject of concern, so in response the U.S. Department of Energy has published a technical brief entitled [True Colors: LEDs and the Relationship Between CCT, CRI, Optical Safety, Material Degradation, and Photobiological Stimulation](#)

**How organic LEDs are the future of sustainable, affordable lighting**

The University of Toronto's Faculty of Engineering recently featured Prof. Zheng-Hong Lu's work on organic LEDs (OLEDs). A recent breakthrough in Prof. Zu's lab led to a \$100,000 Connaught Innovation Award.

Read the [full article](#) online

**AC driven phosphor-free, white-light LED**

A light-emitting diode structure, consisting of a p-GaN layer, a CdZnO/ZnO quantum-well (QW) structure, a high-temperature-grown ZnO layer, and a GaZnO layer, is fabricated. Under forward bias, the device effectively emits green-yellow light, from the QW structure, at the rim of device mesa. Under reverse bias, electrons in the valence band of the p-GaN layer move into the conduction band of the GaZnO layer, through a QW-state-assisted tunneling process, to recombine with the injected holes in the GaZnO layer, for emitting yellow-red and shallow ultraviolet light over the entire mesa area. Also, carrier recombination in the p-GaN layer produces blue light. By properly designing the thickness of the high-temperature-grown ZnO layer,

the emission intensity under forward bias can be controlled such that, under alternating-current operation at 60 Hz, the spatial and spectral mixtures of the emitted lights of complementary colors, under forward and reverse biases, result in white light generation based on persistence of vision.. [Read more](#)

**EDUCATION****AIA/NCQLP/IDCEC EDUCATION****Metalumen is proud to be CEU accredited!**

We are now an accredited provider for the American Institute of Architects (AIA), Interior Design Continuing Education Council (IDCEC) and National Council on Qualifications for the LightingProfessions (NCQLP) for continuing education. All our lighting focused seminars demonstrate best practices in lighting application, strategies in energy conservation, and human centric drivers for wellbeing per application and maintenance factors. Each seminar is 1 to 2 hours in length and qualifies for 0.2 to 2.0 CEU, LEU and LU credits.



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