

Phosphorescent OLEDs for Displays and Lighting:

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Abstract

OLED displays are now in commercial production for a range of products from cell phones, through to the new 4K HDR OLED TV's. They offer excellent visual performance, and through the use of phosphorescent OLED technology, lower power consumption than AMLCDs. Indeed, the power savings offered by this technology is enabling OLEDs to become an important technology for energy efficient solid state lighting. Flexible and transparent OLED devices are still in their infancy, and exciting products with revolutionary form factors will appear over the next few years, providing a much greater differentiation from older technologies.

In this presentation we will outline the status, challenges and opportunities for OLED technology and outline a roadmap to link exciting new display and lighting products to technological advances. We will discuss the factors that control both the efficiency and lifetime of OLED devices and show why high efficiency is so important. Finally we will outline the value proposition for OLED lighting.