



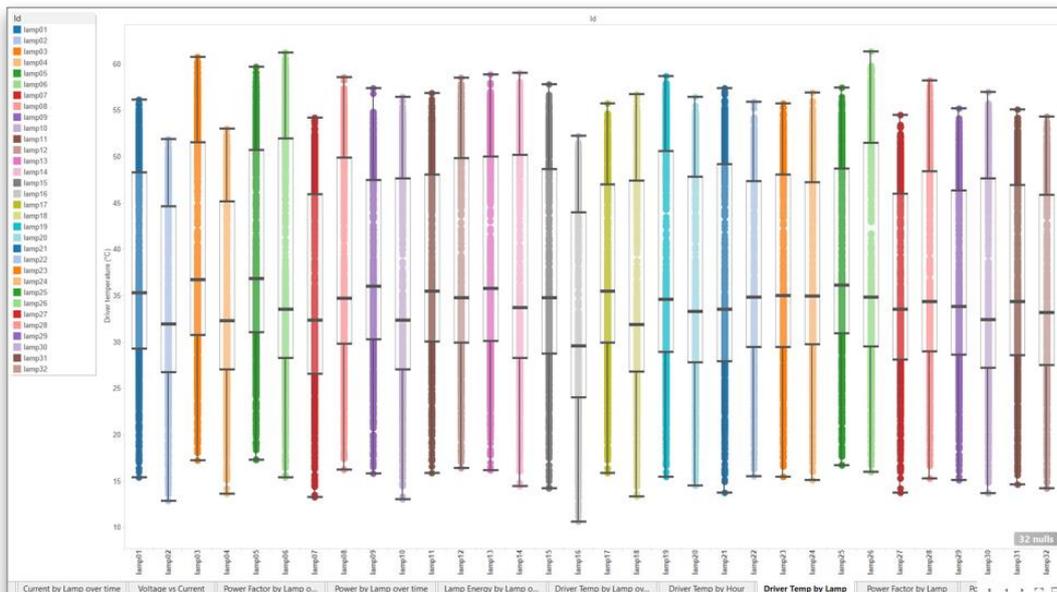
Induction and LED Lighting systems for streetlights

When LEDs were established as the future of lighting, it was expected that they would stimulate a new approach to both products and design applications, enabling a rush of creative new solutions. However, so far the newest LED luminaires often look like their conventional predecessors, and most building applications remain similarly consistent, with new technologies simply replacing older lamps.

The Abu Dhabi Municipality (ADM) has been quietly running a pilot with induction street lighting for the past 18 months. The pilot contains a central management system, supporting smart lighting with dimming controls and data gathering from energy and temperature measurements.



The pilot was designed not just to demonstrate the ruggedness of induction lighting as a street light technology for hot, humid climates, but also to explore possible 'killer apps', compelling uses of IoT-enabled luminaires that will lead to early market adoption. These include uses in security, traffic management, asset management and healthcare. The manufacturer behind this pilot wanted to stop treating the bulbs as a sale and profit item, and instead consider them as a tool and a cost in a radically reshaped model that relies on selling a wide range of industrial and commercial services.



Lumen degradation is an issue for all lighting applications. So, ADM was concerned about whether the streets will still be adequately lit after 10 years. The best systems can compensate for lumen degradation in the driver by gradually increasing output over time, or by doing the same on a larger scale using light level measurement in the control system. The alternative is to compensate in the lighting design, which results in spaces becoming over-lit for most of their lives. Sadly, many systems are selected because they are inexpensive, lacking smart drivers or controls to adequately improve the functions and life of the system.

Michael Ng, CEO of Amko SOLARA Lighting
<http://www.amkosolara.com>