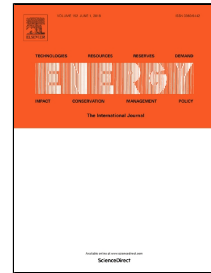


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Andrej Djuretic, Miomir Kostic



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# Actual energy savings when replacing high-pressure sodium with LED luminaires in street lighting

Andrej Djuretic <sup>a</sup>, Miomir Kostic <sup>b,\*</sup>

<sup>a</sup> Minel-Schröder Luminaire Factory, Tosin bunar 51, 11000 Belgrade, Serbia

<sup>b</sup> Faculty of Electrical Engineering, University of Belgrade, Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia

\* Corresponding author. Faculty of Electrical Engineering, University of Belgrade, Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia.

*E-mail address: kostic@etf.rs*

## Abstract

Numerous independent field research studies, trying to establish actual energy savings when replacing high-pressure sodium (HPS) luminaires with LED ones in street lighting, had serious deficiencies. Therefore, our approach was based on equal photopic or mesopic luminance levels when comparing street lighting installations. In addition, a novel approach, considering energy efficiency indicators of LED luminaires in both the standard and reduced lighting regimes, enabled the determination of their energy saving potential in various dimming scenarios. The stated requirements for a case street could represent guidelines for future pilot projects in this field. The comparison of the measurement results obtained using both the telemanagement system and

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