Standards Alert

Subject: Guide to the Use of LED Road Lighting Luminaires
Control Ref No: StdsA437A
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Supersedes: StdsA437

For Policy/Procedure/Manual: Public Lighting Design Manual & EX 00767 EE NA000403R434
Expiry Date: 30/06/2019

Originating Dept: Asset Standards:- Line Standards
Target Audience: EQL

1. Amendment Record

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Amendments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>15/01/2019</td>
<td>A. Bletchly</td>
<td>Initial Issue</td>
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<tr>
<td>A</td>
<td>04/02/2019</td>
<td>A. Bletchly</td>
<td>Clarify Maintenance Factor requirements for IP5X and IP6X luminaires.</td>
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2. Objective

This Standards Alert provides guidance on the use of LED road lighting luminaires on the Energex and Ergon Energy networks. The photometric performance of LED luminaires differs from High Intensity Discharge (HID) luminaires and gives the designer more options to optimise designs. The aim is to establish a uniform statewide approach to the application of this technology.

3. Introduction

With the emergence of LED technology as a viable alternative to existing HID luminaires, Energex and Ergon Energy have introduced a range of LED luminaires suitable for Category 'V' and Category ‘P’ road lighting. The move to LED luminaires will have both an operational and maintenance benefit over the life of the luminaires.

4. Designing with LED luminaires

The range of LED luminaires available for use in the Energex and Ergon Energy networks is available in Standards Alert StdsA406B and the Public Lighting Construction Manual. When undertaking designs, attention should be paid to the relevant Australia & New Zealand Standards Series AS/NZS1158, refer table below and the specific Road Controlling Authority requirements.

<table>
<thead>
<tr>
<th>Lighting Standard Category</th>
<th>Standards Australia Reference</th>
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<tbody>
<tr>
<td>Category P</td>
<td>AS/NZS 1158.3.1</td>
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<tr>
<td>Category V</td>
<td>AS/NZS 1158.1.1 and 1158.1.3</td>
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<tr>
<td>Category PX</td>
<td>AS/NZS 1158.4</td>
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The Australian and New Zealand Standards Lighting Committee LG002 is still considering the best option for determining maintenance factors for LED luminaires. Until this has been finalised the following maintenance factor shall be used for all LED designs:
- IP5X luminaires: - 0.7
- IP6X luminaires: - 0.75
All other aspects of a public road lighting design undertaken so as to be installed upon the Energex and Ergon Energy networks shall comply with the Public Lighting Design Manual.

5. Update to Manuals

The Public Lighting Design Manual will be updated with this requirement in the next revision.

6. Further Information

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