

**New Zealand Energy Efficiency and Conservation Authority (EECA)**  
**Level One 44 The Terrace PO Box 388 Wellington**  
T: 04 470 2246  
F: 04 499 5330  
M: 021 209 1721

Dear Richard:

Greetings from New Zealand. Thank you for providing the draft Energy Star document on solid-state lighting. Gleb Speranski and I have read the document and have a few minor comments.

1) LED Useful Life, L<sub>70</sub> (p. 3). The minimum value of L<sub>70</sub> is set at 35,000 hours in the draft. We note that a document published by the Illuminating Engineering Society of North America (IESNA TM-16-05) recommends a lifetime of 50,000 hours. Perhaps this value is outdated.

2) Driver Requirements - Minimum Operating Temperature (p. 4). Perhaps this should state: "Driver shall have a minimum operating temperature of -20 degC or below."

3) Minimum Luminaire Efficacy (pp. 5, 6). Should the first sentence in the last paragraph on page 5 read, "Minimum luminaire efficacy levels ..."? Similarly on the left-hand side of the equation at the top of page 6: "Minimum Luminaire Efficacy = ...". In the same equation, 0.8 should be 80, and in the example that follows, 0.7 should be 70 and 0.8 should be 80.

As a final note, I see that the National Institute of Standards and Technology (NIST) is working on a replacement for the CRI that better suits solid-state lighting. A description of the Color Quality Scale (CQS) is given on their website: <http://www.physics.nist.gov/Divisions/Div844/facilities/vision/color.html>

The draft looks very good and obviously represents a lot of work.

Best regards,

Richard White  
Technical Standards Adviser

*EECA is improving energy choices. Find out more by visiting [www.eeca.govt.nz](http://www.eeca.govt.nz)*