Brief comments on DR AS/NZS 4282: 2018:

Control of obtrusive effects of outdoor lighting

Sydney at night. Photo Nick Lomb

This standard is the revision of the original AS4282 standard released in 1997. Note that 20 years ago the biological effects of light, especially blue light, were unknown. As well, the now ubiquitous blue-rich LED lights were not yet present.

The standard is highly important to both those developing outdoor lighting and to those who want to object to proposals for unsuitable lighting installations.

Committee LG-010 that developed the draft standard are looking for comments that must be made by 8 June 2018. These comments need to be sensible, carefully made and fit the prescribed format as otherwise they will be disregarded.

The draft is available through the link: https://infostore.saiglobal.com/en-au/Standards/DR-AS-NZS-4282-2018-1966133/. Note that pdf versions are free.

A few personal comments on the draft:

1. Preface (a) That the document is no longer just for guidance is a major step forward.

2. Preface (b) The inclusion of advertising signs and the lighting of facades is again of crucial importance and its lack was often a major difficulty when objecting to Development Applications using the 1997 edition. Section 3.3.4 and table 3.5 are particularly useful.

3. Appendix A provides excellent guidance on reducing light spill, but it is a great pity that it is specifically marked as informative only.

4. The inclusion of Appendix C is a good idea, but it does not provide specific guidance to lighting designers.

5. The great failure of the draft in my opinion is that it does not address the two major developments in lighting in the twenty years since the original version of AS4282: the 2002 discovery of Intrinsically photosensitive retinal ganglion cells (ipRGCs) and the related effect of blue light on human and animal circadian rhythm, and the development and wide-spread adoption of LED light sources with strong peaks in the blue part of the spectrum. A 4000K LED light curve is included as figure C1, but without any obvious purpose. In clause 2.4.4 there is a brief mention that high colour temperature should be avoided near observatories; that's good but not enough.

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