WORKSHOP - INTERIOR LIGHTING DESIGN: METRICS AND METHODS

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Abstract

1. Motivation, specific objective

The lighting industry, and lighting design in particular, uses a well-established set of metrics and methods when designing lighting installations. These have become coded into standards and regulations, providing established benchmarks for both measurement and design. However whilst these have proven useful and have produced many good designs, they may not be the best solution for new technologies, energy efficiency and sustainability requirements, and with the increased understanding of both visual and biological impacts of light.

There is a need to reassess our use of common metrics and methods, and the possible suitability of proposed new metrics and methods, based upon current knowledge. It is important that any new system for design ensures that;

- Criteria and methods exist or can be developed.

- Criteria are calculable in design and measurable/verifiable in the field after installation.

- Criteria and methods produce outcomes that preserve or enhance lighting quality whilst being energy efficient and sustainable.

- New criteria and methods can co-exist with existing criteria to allow a managed change within standards and regulations, and are accepted by the design community, the value chain of developers / building owners etc., and by regulators/policy-makers.

- Criteria and methods are easy to understand and use.

This review should cover all metrics used within design and should also consider whether any additional metrics would be beneficial.

Methods

This will be in the form of a workshop to be held during the CIE 2023 Quadrennial session, with 3 small presentations to set the scene, followed by a mediated open discussion.

3. Results

Output from the workshop to be fed as input into CIE research strategy and/or Divisional work plan.

4. Conclusions

Not applicable until after the workshop.