

Workshop

DEFINITION OF RADIANCE AND LUMINANCE

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Summary

One of the important roles of the CIE is the creation and maintenance of terms and definitions relating to the areas of its work. In addition to maintaining the International Lighting Vocabulary (CIE S 017/E:2011), the CIE is also called upon by other organizations to provide advice on terms and definitions in the field of light and lighting. Within the CIE, experts in Division 2 provide input into terms and definitions relating to the physical measurement of light and radiation. This includes the definitions of the fundamental units as well as terms relating to the characterization of sources, detectors and the optical properties of materials.

One of the most contentious discussion points in this area is in relation to the definition of radiance and its photometric equivalent luminance. The current definition was agreed in 2011, but there remains a considerable body of opinion that feels that the current definition is incomplete at best or is mathematically inconsistent or plain wrong at worst.

The purpose of this workshop is to propose a new definition. Speakers will present a brief historical background and different ways of approaching the proposed definition. Most importantly, we will give attendees ample opportunity to provide their input and generate some good discussion on the topic.