PWSOI-9

PROGRESS IN THE CHARACTERISATION OF OFFICE LIGHTING

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CIE TC 8-10 has been undertaking a study of viewing conditions in office environments where colour is appraised without the use of standard viewing cabinets. Its term of references are to report on the spectral power distribution and illumination levels used to view images in office lighting conditions, this report to be based on emprical research.

A pilot measurement phase was completed in 2007, and subsequently the experimental guidelines have been finalised and a considerable amount of new measurement data collected from offices in Europe, Asia and North America. A set of white papers with different degrees of fluorescent whitening agent are measured in typical viewing locations for both hard and soft copy; the resulting measurements permit estimation of spectral irradiance and UV content of the course.

Participants also measure a calibrated LED source fitted with white and red LEDs, enabling correction for the characteristics of different instruments. Work is also underway to normalise all data to 1-nm intervals, and to further characterise the reference papers by use of goniomicrophometry and bispectral reflectance measurements.