

## photometry

The measurement of light over wavelengths which produce visual sensation (approximately 380 - 780 nm). Thus photometric quantities do not refer to a specific wavelength but to the light emitted by a standard source (formerly a 'standard international candle', now a blackbody radiator emitting at the temperature of solidifying platinum, 2042 K). Luminance and illuminance are the photometric analogues of the radiometric quantities radiance and irradiance, respectively, but conversion from photometric units (e.g.  $\text{lm cm}^{-2}$ ) to radiometric units (e.g.  $\text{J s}^{-1} \text{cm}^{-2}$ ) requires convolution over wavelength of the spectral radiation with the relative spectral response of the human eye. The standard response is called the 'spectral luminous efficiency of radiation', and is tabulated for daylight adapted vision in photopic response tables.

**Source:**

PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2206