

sipated by auxiliary equipment (such as ballasts etc.), if any, is included in the power consumed by the source; (2) if not otherwise specified, the measurement conditions should be the reference conditions specified in the relevant IEC standard (see **Rated luminous flux**).

Luminous environment: lighting considered in relation to its physiological and psychological effects.

Luminous flux (Φ): quantity derived from radiant flux (radiant power) by evaluating the radiation according to the spectral sensitivity of the human eye (as defined by the CIE standard photometric observer). It is the light power emitted by a source or received by a surface. Unit : lumen (lm).

Notes: (1) in this definition, the values used for the spectral sensitivity of the CIE standard photometric observer are those of the spectral luminous efficiency function $V(\lambda)$; (2) see *IEC 50 (845)*; *CIE 17.4*; *845-01-22* for the definition of spectral luminous efficiency, *845-01-23* for the definition of the CIE standard photometric observer, and *845-01-56* for the definition of luminous efficacy of radiation. See also *ISO/CIE 10527*.

Technically defined as:

$$\Phi = K_m \int_{-\infty}^{\infty} (d\Phi_e(\lambda)/d\lambda) \nu(\lambda) d(\lambda)$$

where $d\Phi(\lambda)/d\lambda$ is the spectral distribution of radiant flux, and $\nu(\lambda)$ is the spectral luminous efficiency.

Luminous intensity (of a point source in a given direction) (I): luminous flux per unit solid angle in the direction in question, i.e. the luminous flux on a small surface, divided by the solid angle that the surface subtends at the source. Unit: candela = lumen per steradian.

Technically defined as quotient of the luminous flux $d\Phi$ leaving the source and propagated in the element solid angle $d\Omega$ containing the given direction, by the element solid angle. $I = d\Phi/d\Omega$.

Maintained illuminance: value below which the average illuminance on the specified area should not fall. It is the average illuminance at the time maintenance should be carried out. Unit: lux.

Maintenance cycle: repetition of lamp replacement, lamp/luminaire cleaning and room surface cleaning intervals.

Maintenance factor: ratio of the average illuminance on the working plane after a certain period of use of a lighting installation to the average illuminance obtained under the same condition for the installation considered conventionally as new.

Notes: (1) the term depreciation factor has been formerly used to designate the reciprocal of the above ratio; (2) the maintenance factor of an installation depends on lamp lumen maintenance factor, lamp survival factor, luminaire maintenance factor and (for an interior lighting installation) room surface maintenance factor.

Maintenance schedule: set of instructions specifying maintenance cycle and servicing procedures.