

lated colour temperature of a stimulus is to determine on a chromaticity diagram the temperature corresponding to the point on the Planckian locus that is intersected by the agreed isothermperature line containing the point representing the stimulus; (2) reciprocal correlated colour temperature is used rather than reciprocal colour temperature whenever correlated colour temperature is appropriate.

Cosine correction: correction of a detector for the influence of the incident direction of the light.

Note: for the ideal detector, the measured illuminance is proportional to the cosine of the angle of incidence of the light, where the angle of incidence is the angle between the direction of the light and the normal to the surface of the detector.

Cut-off: technique used for concealing lamps and surfaces of high luminance from direct view in order to reduce glare.

Note: in public lighting, distinction is made between full-cut-off luminaires, semi-cut-off luminaires and non-cut-off luminaires.

Cut-off angle (of a luminaire): angle, measured up from nadir, between the vertical axis and the first line of sight at which the lamps and the surfaces of high luminance are not visible.

Cylindrical illuminance (at a point) (E_Z): total luminous flux falling on the curved surface of a very small cylinder located at the specified point divided by the curved surface area of the cylinder. The axis of the cylinder is taken to be vertical unless stated otherwise. Unit: lux.

Technically defined by the formula:

$$E_Z = \frac{1}{\pi} \int_{4\pi \text{ sr}} L \sin \epsilon d\Omega$$

where $d\Omega$ is the solid angle of each elementary beam passing through the given point, L is its luminance at that point, and ϵ is the angle between it and the given direction.

Daylight: visible part of global solar radiation.

Note: when dealing with actinic effects of optical radiations, this term is commonly used for radiations extending beyond the visible region of the spectrum.

Daylight factor (D): ratio of the illuminance at a point on a given plane due to the light received directly or indirectly from a sky of assumed or known luminance distribution, to the illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The contribution of direct sunlight to both illuminances is excluded.

Notes: (1) glazing, dirt effects, etc. are included; (2) when calculating the lighting of interiors, the contribution of direct sunlight must be considered separately.

Diffuse sky radiation: that part of solar radiation which reaches the Earth as a result of being scattered by the air molecules, aerosol particles, cloud particles or other particles.