

Part 4

Glossary

The glossary contains definitions of the basic terms and criteria necessary for the specification of lighting.

The definitions closely follow those given in the draft CEN standard *Lighting Applications – Basic terms and criteria for specifying lighting requirements*.

Absorptance (α): ratio of the luminous flux absorbed in a body to the luminous flux incident on it.

Note: the absorptance generally depends on the direction and spectral distribution of the incident light and on the surface finish.

Accommodation: adjustment of the power of the lens of the eye for the purpose of focusing an image of an object on the retina.

Technically defined as adjustment of the dioptric power of the crystalline lens by which the image of an object, at a given distance, is focused on the retina.

Adaptation: process that takes place as the visual system adjusts to the luminance and colour of the visual field or the final state of this process.

Technically defined as the process by which the state of the visual system is modified by previous and present exposure to stimuli that may have various luminances, spectral distributions and angular subtenses.

Notes: (1) the terms *light adaptation* and *dark adaptation* are also used, the former when the luminances of the stimuli are of at least several candelas per square metre, and the latter when the luminances are of less than some hundredths of a candela per square metre; (2) adaptation to specific spatial frequencies, orientations, sizes etc. are recognised as being included in this definition.

Average illuminance: illuminance averaged over the specified area. Unit: lux.

Note: in practice this may be derived either from the total luminous flux falling on the surface divided by the total area of the surface, or alternatively from an average of the illuminances at a representative number of points on the surface.

Average luminance (L_{av}): luminance averaged over the specified area or solid angle. Unit: candela per square metre.

Ballast: a device connected between the supply and one or more discharge lamps that serves mainly to limit the current of the lamp(s) to the required value.

Note: a ballast may also include means of transforming the supply voltage and correcting the power factor and, either alone or in combination with a starting device, provide the necessary conditions for starting the lamp(s).

Ballast lumen factor: ratio of the luminous flux emitted by a reference lamp when operated with a particular production ballast to the luminous flux emitted by the same lamp when operated with its reference ballast.