

Tandem circuit

Operation of two → fluorescent lamps switched in series on one → ballast

Task lighting

Used generally to describe the illumination of workplaces in accordance with given standards and regulations. Additional lighting of the workplace which goes beyond → general lighting to meet the demands of specific visual tasks

Thermal radiator

Radiant source which emits light through the heating of a material. An ideal → Planckian radiator emits a spectrum pursuant to the Planck's Law; in the case of materials used in practice (e.g. tungsten in wire filaments) the spectrum produced differs slightly from this spectral distribution

Thermoluminescence

→ Luminescence

Transformer

→ Control gear

Transmission

Ability of materials to allow light to pass through them. This ability is expressed as a transmission factor, which is defined as the ratio of transmitted luminous flux to the luminous flux falling on a surface

Tri-phosphor lamp

→ Fluorescent lamp

Ultraviolet radiation

Invisible radiation below short-wave light (wavelength <380 nm). Light sources used for architectural lighting only emit a small portion of ultraviolet radiation. Special light sources designed to produce a higher portion of ultraviolet radiation are used for medical and cosmetic purposes (disinfection, tan effect) and in photochemistry. Ultraviolet radiation can have a damaging effect: colours fade and materials become brittle.

Utilance

Utilance is the ratio of the → luminous flux falling on the working plane to the luminous flux emitted by a luminaire. It is the result of the correlation of room geometry, the reflectance of the room surfaces and the luminaire characteristics

Utilisation factor method

Method for calculating the average → illuminance of spaces with the aid of the → light output ratio, the → utilance and the lamp lumens

VDT-approved luminaire

luminaires designed for application in offices equipped with visual display terminals

Visual acuity

Ability of the eye to perceive details. The unit of measure is the visus, which is defined as the reciprocal value of the size of the smallest detail that can be perceived (usually the position of the opening in the Landolt broken ring) in minutes of arc

Visual comfort

Visual comfort is generally understood as the quality of a lighting installation that meets a number of quality criteria. (→ illuminance, → luminance ratios, → colour rendition, → modelling)

Visual task

Expression for the perceptual performance required of the eye or for the visual qualities of the object to be perceived. The grade of difficulty of a visual task grows with diminishing colour or luminance contrast, and with the diminishing size of details

Warm white, ww

→ Luminous colour

Working plane

Standardised plane to which illuminances and luminances are related, usually 0.85 m in the case of workplaces and 0.2 m in circulation zones

Zoning

Dividing up of the space into different areas relating to their function

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5.0 Appendix Bibliography

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