

Dusk to Dawn: Reducing Light Pollution

Terminology Guide

Luminaire – a complete lighting unit consisting of a lamp or lamps and ballast(s) (when applicable) together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply.

Luminance – the quantity of light emitted from a source.

Illuminance – the quantity of light incident on a surface, measured in footcandles or lux.

A footcandle (fc) or lux – a measure of light falling on a given surface. 1 footcandle = 10.76391 lux

BUG rating – a luminaire classification system that classifies luminaires in terms of backlight (B), uplight (U), and glare (G) (taken from IES/IDA Model Lighting Ordinance). BUG ratings supersede the former cutoff ratings.

Emergency Lighting – a luminaire that operates only during emergency conditions and is always off during normal building operation.

Light pollution – waste light from building sites that produces glare, is directed upward to the sky, or is directed off the site. Waste light does not increase nighttime safety, utility, or security and needlessly consumes energy.

Light trespass – obtrusive illumination that is unwanted because of quantitative, directional, or spectral attributes. Light trespass can cause annoyance, discomfort, distraction, or loss of visibility.

Sky glow – is caused by stray light from unshielded light sources and light reflecting off surfaces that then enter the atmosphere and illuminate and reflect off dust, debris, and water vapor. Sky glow can substantially limit observation of the night sky, compromise astronomical research, and adversely affect nocturnal environments.

Mounting height – the distance between ground level (or the workplane) and the bottom of the luminaire (light fixture); the height at which a luminaire is installed. (Adapted from Light a Home)

Ornamental luminaire – a luminaire intended for illuminating portions of the circulation network that also serves an ornamental function, in addition to providing optics that effectively deliver street lighting, and has a decorative or historical period appearance.

Vertical illuminance – illuminance levels calculated at a point on a vertical surface, or that occur on a vertical plane. This lighting affects spatial limits and proportions.