

Illuminance

Illuminance Is The Quantity Of Light, Or Luminous Flux, Falling On A Unit Area Of A Surface.

It is designated by the symbol E .

The unit is the lux (lx).

One lux equals one lumen per square metre (lm/m^2).

The illuminance is independent of the direction from which the luminous flux reaches the surface.

Some practical examples of common lux levels are given below:

Summer, at noon, under a cloudless sky 100 000 lux

Street lighting 5 – 30 lux

Full moon, on a clear night 0.25 lux

The illuminance is measured by the instrument called illuminance meter or luxmeter. It uses a photocell that must be corrected by a special filter in order to match the $V(\lambda)$ sensitivity curve of the human eye.