

For a diffuse surface:

$$luminance = \frac{(illuminance \times reflectance)}{\pi}$$

Measure	Definition	Units
Luminance factor	The ratio of the luminous flux reflected from a surface to the luminous flux incident on it The ratio of the luminance of a reflecting surface viewed from a given direction to that of a perfect white uniform diffusing surface identically illuminated	

For a non-diffuse surface, for a specific direction and lighting geometry:

$$luminance = \frac{(illuminance \times luminance \ factor)}{\pi}$$

2.6 Typical Values

Table 2 shows some illuminances and luminances typical of commonly occurring situations, all measured using the CIE Standard Photopic Observer.

Table 2

Typical illuminance and luminance values:

Situation	Illuminance (lm/m ²) or lux	Typical surface	Luminance (cd/m ²)
Clear sky in summer in temperate zones	100,000 lx	Grass	1,910
Overcast sky in summer in temperate zones	16,000 lx	Grass	300
Moonlight	0.5 lx	Asphalt road surface	0.01