

Table 1 — Relationship of illuminances on immediate surrounding to the illuminance on the task area

Illuminance on the task area E_{task} lx	Illuminance on immediate surrounding areas lx
≥ 750	500
500	300
300	200
200	150
150	E_{task}
100	E_{task}
≤ 50	E_{task}

4.3.5 Illuminance on the background area

In indoor work places, particularly those devoid of daylight, a large part of the area surrounding an active and occupied task area needs to be illuminated. This area known as the “background area” should be a border at least 3 m wide adjacent to the immediate surrounding area within the limits of the space and shall be illuminated with a maintained illuminance of 1/3 of the value of the immediate surrounding area.

The size and position of the background area should be stated and documented.

4.3.6 Illuminance uniformity

In the task area, the illuminance uniformity (U_o) shall be not less than the minimum uniformity values given in the tables of Clause 5.

For lighting from artificial lighting or roof lights the illuminance uniformity:

- in the immediate surrounding area shall be $U_o \geq 0,40$;
- on the background area shall be $U_o \geq 0,10$.

For lighting from windows:

- in larger areas, activity areas and background areas the available daylight decreases rapidly with the distance from the window; the additional benefits of daylight (see 4.12) can compensate for the lack of uniformity.

4.4 Illuminance grid

Grid systems shall be created to indicate the points at which the illuminance values are calculated and verified for the task area(s), immediate surrounding area(s) and background area(s).

Grid cells approximating to a square are preferred, the ratio of length to width of a grid cell shall be kept between 0,5 and 2 (see also EN 12193 and EN 12464-2). The maximum grid size shall be: