

NOTE 2 In some enclosed places such as offices, education, health care and general areas of entrance, corridors, stairs, etc., the walls and ceiling need to be brighter. In these places it is recommended that the maintained illuminances on the major surfaces should have the following values: $E_m > 75$ lx with $U_o \geq 0,10$ on the walls and $E_m > 50$ lx with $U_o \geq 0,10$ on the ceiling.

4.3 Illuminance

4.3.1 General

The illuminance and its distribution on the task area and on the surrounding area have a great impact on how quickly, safely and comfortably a person perceives and carries out the visual task.

All values of illuminances specified in this European Standard are maintained illuminances and fulfil visual comfort and performance needs.

All maintained illuminance and uniformity values are dependent upon the grid definition (see 4.4).

4.3.2 Scale of illuminance

To give a perceptual difference the recommended steps of illuminance (in lx) are according to EN 12665:

20 - 30 - 50 - 75 - 100 - 150 - 200 - 300 - 500 - 750 - 1 000 - 1 500 - 2 000 - 3 000 - 5 000

4.3.3 Illuminances on the task area

The values given in Clause 5 are maintained illuminances over the task area on the reference surface which can be horizontal, vertical or inclined. The average illuminance for each task shall not fall below the value given in Clause 5, regardless of the age and condition of the installation. The values are valid for normal visual conditions and take into account the following factors:

- psycho-physiological aspects such as visual comfort and well-being;
- requirements for visual tasks;
- visual ergonomics;
- practical experience;
- contribution to functional safety;
- economy.

The value of illuminance may be adjusted by at least one step in the scale of illuminances (see 4.3.2), if the visual conditions differ from the normal assumptions.

The required maintained illuminance should be increased when:

- visual work is critical;
- errors are costly to rectify;
- accuracy, higher productivity or increased concentration is of great importance;
- task details are of unusually small size or low contrast;
- the task is undertaken for an unusually long time;