FprEN 12464-1:2011 (E)

NOTE 1 The ratio of cylindrical to horizontal illuminance at a point is an indicator of modelling. The grid points for cylindrical and horizontal illuminances should coincide.

NOTE 2 For uniform arrangement of luminaires or roof lights a value between 0,30 and 0,60 is an indicator of good modelling.

NOTE 3 Daylight is distributed predominantly horizontally from windows. The additional benefits of daylight (see 4.12) can compensate for its effect on modelling values, and modelling values from daylight can be extended from the range indicated

4.6.4 Directional lighting of visual tasks

Lighting from a specific direction can reveal details within a visual task, increasing their visibility and making the task easier to perform. Unintended veiling reflections and reflected glare should be avoided, see 4.5.4.

Harsh shadows that interfere with the visual task should be avoided. But some shadows help to increase the visibility of the task.

4.7 Colour aspects

4.7.1 General

The colour qualities of a near-white lamp or transmitted daylight are characterised by two attributes:

- the colour appearance of the light;
- its colour rendering capabilities, which affect the colour appearance of objects and persons.

These two attributes shall be considered separately.

4.7.2 Colour appearance

The colour appearance of a lamp refers to the apparent colour (chromaticity) of the light emitted. It is quantified by its correlated colour temperature (T_{CP}).

Colour appearance of daylight varies throughout the day.

Colour appearance of artificial light can also be described as in Table 3.

Table 3 — Lamp colour appearance groups

Colour appearance	$\begin{array}{c} \textbf{Correlated colour temperature} \\ T_{\text{CP}} \end{array}$
warm	below 3 300 K
intermediate	3 300 to 5 300 K
cool	above 5 300 K

The choice of colour appearance is a matter of psychology, aesthetics and what is considered to be natural. The choice will depend on illuminance level, colours of the room and furniture, surrounding climate and the application. In warm climates generally a cooler light colour appearance is preferred, whereas in cold climates a warmer light colour appearance is preferred.