

station, e.g. reading from the screen or printed text, writing on paper, and keyboard work.

For these areas, the lighting criteria and system shall be chosen in accordance with the activity area, task type and type of interior, as set out in the Lighting schedule (section 2.5).

The DSE and, in some circumstances, the keyboard may suffer from reflections, causing disability and discomfort glare. It is therefore necessary to select, locate and arrange the luminaires to avoid high brightness reflections.

### 2.3.10.1 Luminaire luminance limits

Table 2.4 gives the limits of the average luminaire luminance at elevation angles of 65° and above from the downward vertical, and radially around the luminaires, for work places where the screens (which are vertical or inclined up to a 15° tilt angle) are used.

**Note:** For certain special places using, for example, sensitive screens or variable inclination, the luminance limits in the table should be applied for a lower elevation angle (e.g. 55°) of the luminaire.

**Table 2.4** VDT screen class and maximum luminaire luminance

Screen classes in accordance with BS EN ISO 9241-7	Maximum luminance (cd/m <sup>-2</sup> ) where some negative polarity used
Type I and II, good or moderate screen treatment	1000
Type III, no screen treatment	200

Where positive polarity software only is used on Type I or II screens, the luminance limit can be increased to 1500 cd/m<sup>-2</sup>; where positive polarity software only is used on Type III screens, the luminance limit can be increased to 500 cd/m<sup>-2</sup>.

## 2.4 Energy efficiency recommendations

Lighting must provide a suitable visual environment within a particular space – sufficient and suitable lighting for the performance of a range of tasks, provision of a desired appearance etc. This objective should be achieved without waste of energy. However, it is important not to compromise the visual aspects of a lighting installation simply to reduce energy consumption. In most organisations the cost of lighting energy, although substantial, is only a small fraction of the total costs associated with the activity in the space. For example, the impact of poor visual conditions on work quality and productivity costs is likely to be many times greater than the lighting energy costs in an office or in a factory (labour costs may typically be around 100 times greater than lighting energy costs). Similarly, in a shop the sales turnover resulting from correct display of merchandise will be very much greater than the energy costs for lighting. It is thus a false economy to save energy at the expense of human effectiveness.