Table 3.1 Diffuse orientation factors for a working day, 0900 hours to 1700 hours

Orientation	Orientation factor (f_o)
North	0.97
East	1.15
South	1.55
West	1.21
Horizontal rooflight	1.00

Diffused illuminance (E_h, klx) availability for Edinburgh.

Methods for calculating the point daylight factor are given in *BRE Digest 303: Estimating Daylight in Buildings*, and in the CIBSE publication *Lighting Guide 10: Daylighting and Window Design*.

The factors for other orientations may be obtained by interpolation. The factors given may be applied with reasonable accuracy for working days finishing between 1600 hours and 1900 hours (see Figures 3.4 and 3.5).

Figures 3.4 and 3.5 give the availability of daylight in London and Edinburgh for various lengths of the working day. The graph for London should be applied to sites in southern and central England; the Edinburgh graph should be applied to sites in Scotland, northern England and Northern Ireland.

For example:

An illuminance of 500 lux is required on a desk for a working day of 0900–1700 hours. The daylight factor at the desk, from an east-facing window, is 0.015, or 1.5 per cent. The building is in southeast England.

The orientation factor is 1.15. The external illuminance required to give 500 lux on the desk is $500/(1.15 \times 0.015) = 28\,986$ lux, or approximately 29 klux. From the London graph (Figure 3.4) it can be seen that this level is achieved for 28 per cent of working hours.

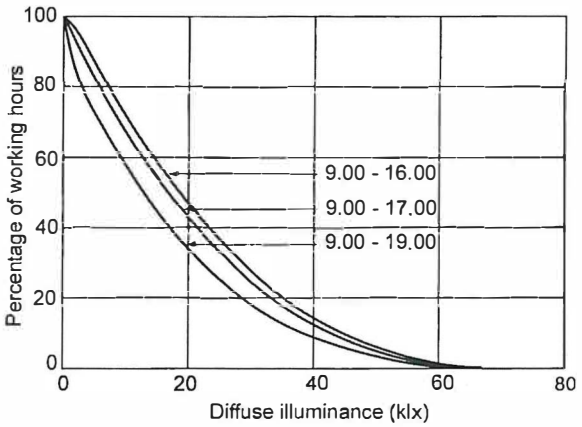

Figure 3.4 Diffuse illuminance (E_h, klx) availability for London

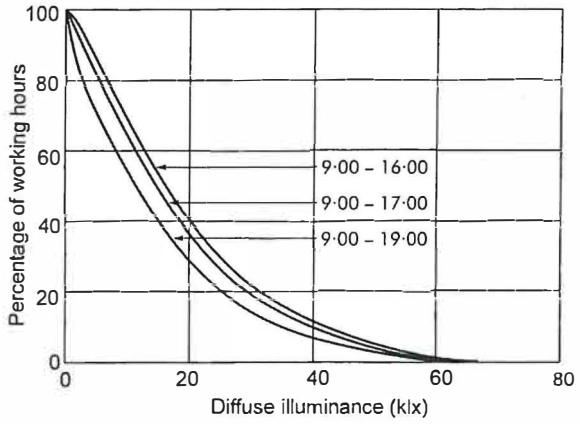

Figure 3.5 Diffuse illuminance (E_h, klx) availability for Edinburgh