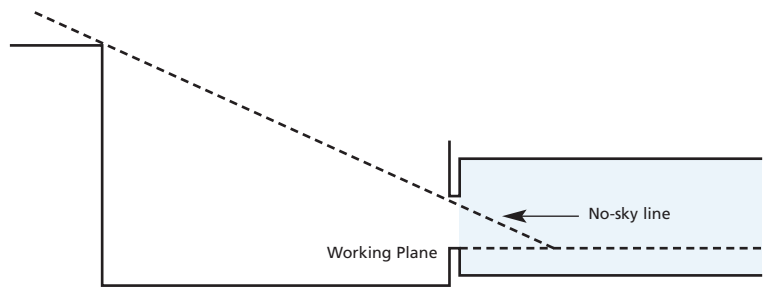


As a rule of thumb, daylight will penetrate to a depth of twice the height of the window head above the window sill, assuming no external obstruction of the sky. Where there is an external obstruction the extent of daylight penetration is given by the no-sky line. This is the line on the working plane beyond which no direct light from the sky will penetrate (Figure 7.6).

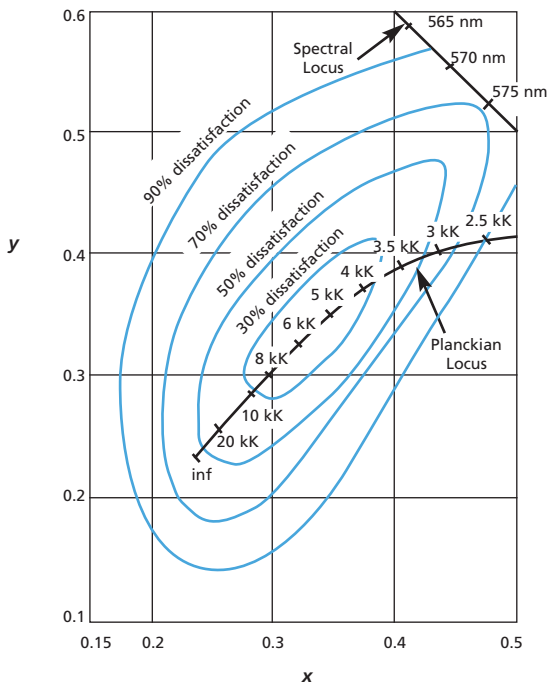


**Figure 7.6** The extent of direct daylight penetration is given by the no-sky line

The important aspects of windows as far as people are concerned are their size, shape, spectral transmittance and solar shielding.

Desired size and shape are determined by the nature of the view out. Glazed areas of 15 percent or less of the window-wall area and window shapes and layouts that break up the view are disliked (Keighly, 1973 a and b). Larger windows are liked depending on the nature of the view.

As for spectral transmittance, there are two aspects that need to be considered, the total transmittance of light and the colour appearance of the light transmitted. Transmittances above about 40 percent are highly acceptable but as the percentage transmittance decreases, percentage acceptance also decreases (Boyce et al, 1995). There are also limits on the colours of the glass that are acceptable (Cuttle, 1979). Figure 7.7 shows the dissatisfaction contours for glass to be used in windows for daylighting. It is clear that glass types with chromaticities that depart from the central part of the black body locus risk being considered unsatisfactory.



**Figure 7.7** Percent dissatisfaction contours for the chromaticity of glazing plotted on the CIE 1931 chromaticity diagram (after Cuttle, 1979)