Very high CCTs will also produce a perception of greater brightness for the same luminance and enhance visual acuity. Whatever light source CCT is chosen should be used throughout the office.

9.4 Approaches to office lighting

9.4.1 Direct lighting

Direct lighting uses luminaires that are designed to emit the vast majority of their light output directly down onto the nominal horizontal working plane. Any upward light emitted plays an insignificant part in lighting the task. Direct lighting luminaires can be surface mounted, recessed into the ceiling or suspended (Figure 9.4).

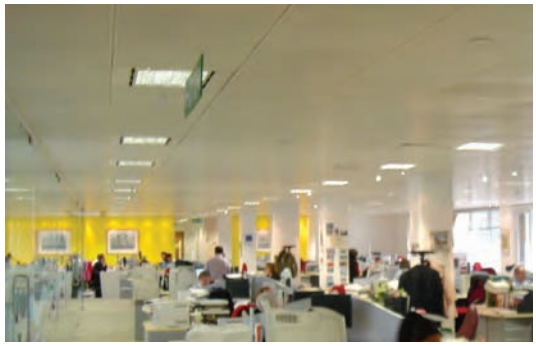

Figure 9.4
Direct lighting in an office

The main potential problem with direct lighting is the fact that the ceiling and the upper parts of the walls tend to be underlit resulting in a gloomy, cave-like appearance. This problem can be alleviated in a number of ways. One is by using high reflectance finishes to the floor, furnishing, walls and ceilings. If this is not practical, then supplementary wall mounted uplighting can be used or a direct lighting luminaire can be chosen that diverts a small amount of light onto the ceiling (Figure 9.5). This will have the effect of making the office appear brighter and more interesting although care has to be taken to avoid high luminance patches appearing on the walls or ceiling as these may be seen as high luminance reflections in computer screens.

Figure 9.5
Reflectors suspended below a direct luminaire to reflect some light onto the ceiling