

'bright', 'dull', 'gloomy', 'under-lit' and 'well-lit'. The spatial distribution of light, particularly on vertical surfaces, determines these reactions and influences adaptation (see section 1.4.6, Adaptation), which affects visual performance. The ratios between task, wall and ceiling luminances have a strong influence on satisfaction (see sections 2.3.4, Luminance and illuminance ratios, and 2.3.5, Room surfaces).

Figure 1.7 shows mean assessments of the quality of lighting obtained in an office lit uniformly by a regular array of luminaires. Increasing the illuminance on the plane of the desk increases the perceived quality of the lighting, until it saturates at about 800 lux. This demonstrates the importance of the illuminance as one factor in determining people's satisfaction with an interior.

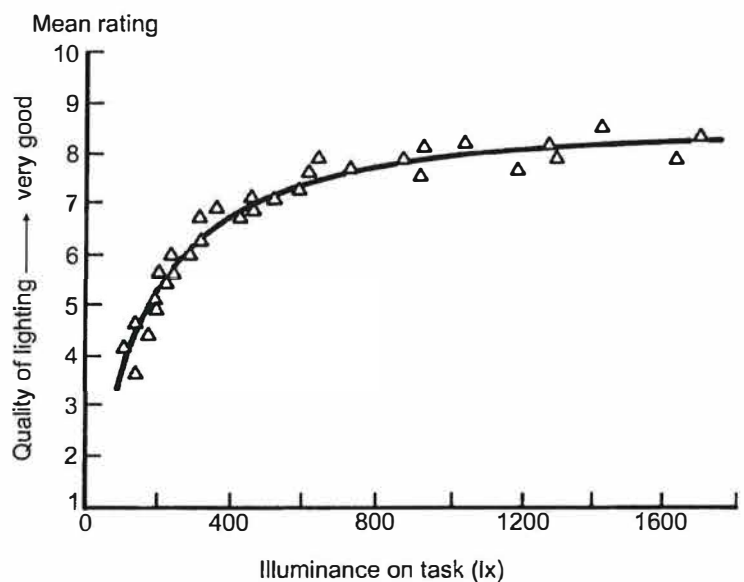


Figure 1.7 Mean assessments of the quality of lighting obtained in an office lit uniformly by a regular array of luminaires

There is no sharp cut-off where lighting conditions move from 'bad' to 'good'. Figure 1.7 shows that as illuminance increases from a low level there is initially a rapid improvement, but as illuminance continues to increase the improvement becomes smaller, until eventually it ceases altogether. So, identifying a suitable illuminance for an interior is a matter of judgement.

The recommended 'standard maintained illuminance' on an appropriate plane for each specific application is given in section 2.5, Lighting schedule. This is converted to the 'design maintained illuminance' by referring to section 2.3.2, Illuminance.

It should be noted that not all working planes are horizontal. Figure 1.8(a) shows vertical task lighting in an art gallery, while Figure 1.8(b) shows vertical task lighting in a supermarket.

1.3.3 Appearance

Any space can be revealed in a variety of ways, and the degree of visual stimulus will depend on the use(s) of the space. Some lighting, especially in non-working environments, will not have a direct, task-related function. Such lighting will express the