

## Part 1

# Visual effects of lighting

### 1.1 Introduction to the visual effects of lighting

The lighting of an interior should fulfil three functions. It should:

- (a) Ensure the safety of people in the interior (Figure 1.1)
- (b) Facilitate the performance of visual tasks (Figure 1.2)
- (c) Aid the creation of an appropriate visual environment (Figure 1.3).

Safety is always important, but the emphasis given to task performance and the appearance of the interior will depend on the nature of the interior. For example, the lighting considered suitable for a factory tool room will place much more emphasis on lighting the task than on the appearance of the room, but in a hotel lounge the priorities will be reversed. This variation in emphasis should not be taken to imply that either task performance or visual appearance can be completely neglected. In almost all situations the designer should give consideration to both these aspects of lighting.

Lighting affects safety, task performance and the visual environment by changing the extent to which, and the manner in which, different elements of the interior are revealed. Safety is ensured by making any hazards visible. Task performance is facilitated by making the relevant details of the task easy to see. Different visual environments can be created by changing the relative emphasis given to the various objects and surfaces in an interior. Different aspects of lighting influence the appearance of the elements in an interior in different ways.

This part of the *Code* discusses the influence of each important aspect of lighting separately. However, it should always be remembered that lighting design involves integrating the various



Figure 1.1 Ensuring the safety of people in the interior



Figure 1.2 Facilitating the performance of visual tasks