



**Figure 13.1**

General lighting of exhibit space with spill lighting



**Figure 13.2**

A high level of diffuse ambient lighting

### 13.2.6 Shadows and modelling

The distribution of light around a three-dimensional exhibit determines the strength and form of the shadow pattern created and hence the strength of modelling. A large area luminaire and a high surface reflectance background will, together, minimise shadows and modelling. A narrow beam spotlight and a low reflectance background will, together, maximise shadows and modelling. What strengths of shadows and modelling are desired is a matter of judgment but exhibits with some modelling are considered more interesting and more attractive than those with none (Mangum, 1998).

### 13.2.7 Glare

The widespread use of spotlights in museums and art galleries makes glare a distinct possibility. Glare from spotlights can usually be avoided if spotlights are aimed not more than 35 degrees above the downward vertical.

### 13.2.8 Veiling reflections and highlights

Objects on display can vary dramatically in their reflection properties. A few are diffuse in reflection but many have a strong specular component. This means that high luminance reflections can be seen in the objects. The most usual sources of high luminance in a museum or art gallery will be windows and luminaires. Whether such high luminance reflections are desirable will depend on the object. For paintings and information presented on computer monitors, high luminance reflections are called veiling reflections and will reduce visibility. For silver and glass objects, high luminance reflections are called highlights and are essential for revealing the nature of the material.

Whether high luminance reflections are present or absent will depend on the geometry between the luminaire, the object and the observer. By careful selection of the location of the luminaire relative to the object and control of its light distribution, high luminance reflections can be minimised or maximised.

### 13.2.9 Out-of-hours activities

Prior to opening and after closing, there are numerous cleaning and curatorial activities that need to be undertaken. During this time, the display lighting should be extinguished and the museum and gallery lit by energy efficient ambient lighting. This is required by Part L of the Building Regulations for energy saving reasons.