However, the illuminance in the circulation space could be less uniform and somewhat higher than the recommended value when using this method. In areas with ceiling heights between 2.4 m and 2.7 m, it is possible to provide the recommended illuminance at the bed head by using surface mounted luminaires alone.

Recessed and semi-recessed luminaires may be used in ceilings between 2.4 m and 3 m high. Luminaire spacing should generally be as described for surface mounted luminaires.

It is also possible to illuminate wards using wall mounted luminaires that combine an upward and downward component. This method has numerous advantages. The downward component allows patients to do visually demanding tasks like reading or jigsaw puzzles. The upward component provides non-glaring, soft illumination to the room allowing the patients to relax. When combined, the upward and downward components can provide the higher level of illumination required for examination or nursing care.

Ward lighting should not cause glare to recumbent and ambulatory patients. Ceiling or wall mounted luminaires should be assessed for their average luminance value at elevation angles between and including angles (a) and (b) in Figures 14.5, 14.6. and 14.7. Ceiling mounted, surface luminaires should not exceed 1500 cd/m^2 for all angles of azimuth. For all ceiling recessed or semi-recessed luminaires the value should be reduced to 1000 cd/m^2. Wall mounted luminaires should be assessed for their average luminance value which should not exceed 700 cd/m^2 for all angles of azimuth, between and including angles (a) and (b), as defined in Figure 14.7 where:

- (h1) is the minimum height of the mattress surface plus 200 mm
- (h2) is the maximum height of the mattress surface plus 600 mm
- (h3) is the height above floor level to the centre of the luminaire
- (d1) is the distance from the wall to the front edge of the pillow
- (d2) is the distance from the wall to front face of bed head
- (d3) is the distance from the wall to the luminaire centre.

The average luminance value of 1500 cd/m^2 (1000 cd/m^2 for recessed or semi-recessed luminaires), is defined as the luminous intensity measured at each 5° angle between and including angles (a) and (b) divided by the sum of all the orthogonally projected luminous areas at each of the elevation angles. This average applies at all angles of azimuth. The average value of 700 cd/m^2 for wall luminaires should not be exceeded anywhere between and including angles (a) and (b) for all angles of azimuth. The designer should use the measurement values relating to the actual or specific areas in question. However, in the absence of specific dimensional data for h1, h2, h3, d1, d2 and d3 the following values should apply;

- h1 = 850 mm
- h2 = 1450 mm
- h3= 2.7 m ceiling mounted, 2.0 m rail mounted, 1.8 m wall mounted
- d1 = 900 mm
- d2 = 450 mm
- d3 = 4.0 m ceiling mounte, 5.0 m rail mounted, 8.0 m wall mounted.