the number of lamps per luminaires; MF is the maintenance factor; UF_F is the utilisation factor for the plane; *F* refers to the horizontal reference plane.

(*f*) Determine a suitable layout.

(*g*) Check that the geometric mean spacing-to-height ratio of the layout is within the range of the nominal spacing-to-height ratio (SHR_{nom}) for which the utilisation factor table is based, i.e.

$$\sqrt{SHR_{ax} \times SHR_{tr}} = SHR_{nom} \pm 0.5$$

If this is not the case, the UF can be recalculated for the actual spacing using the method given in *TM5*. Corrections are also given for luminaire-to-wall spacing other than half of the spacing between luminaires.

(*h*) Check that the proposed layout does not exceed the maximum spacing-to-height ratios (see section 3.8.3.4, Maximum spacing-to-height ratio).

(*i*) Calculate the illuminance that will be achieved by the final layout (see section 3.8.3.1, Utilisation factors).

3.8.4 Specification and interpretation of illuminance variation

It is possible to describe illuminance variation as a series of values or as some form of graphical representation (plot) of a magnitude of variation over a surface. The main methods used in this *Code* are 'uniformity', which is concerned with illuminance conditions on the task and immediate surround, and 'diversity', which expresses changes in illuminance across a larger space. Values of both may be calculated or measured from a grid of discrete illuminance values over a surface (see Figure 3.16 and the figure in Field surveys (see CD)).

The illuminance conditions on the task area locations across the working plane may be represented by a grid of points over the task and immediate surround. If a number of task areas exist, the uniformity must be determined for each and the worst taken as the limiting value of uniformity for the installation. The concept

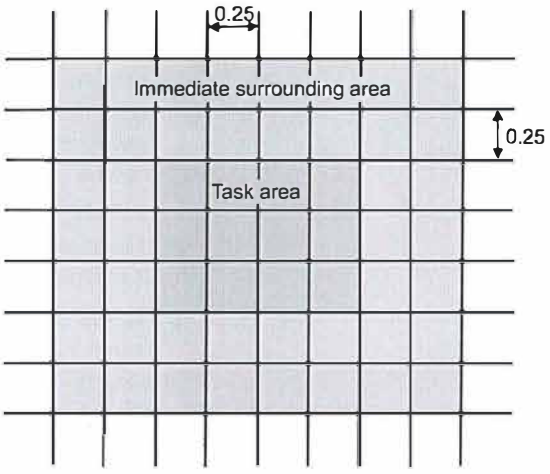

Figure 3.16 Grid for the calculation and measurement of uniformity for a task area and immediate surround