

A specific form of conflict area is the pedestrian crossing. Where a pedestrian crossing is close to a junction it is treated simply as part of the conflict area but where it occurs in isolation there are two possibilities for lighting. One is to use the normal lighting of the traffic route with the crossing positioned at the midpoint between luminaires. The other is to use additional local lighting. The local lighting approach is recommended when the traffic routes are lit to less than lighting class ME3 (see Table 16.2) or the crossing is located on a bend, on the brow of a hill or where the relative positions of the crossing and road lighting luminaires cannot be coordinated. The local lighting should illuminate the crossing to a higher illuminance than is provided on the roads approaching the crossing. A suitable lighting class for horizontal illuminance can be selected from Table 16.5. The local lighting should have strong vertical component to ensure that pedestrians are positively illuminated but care must be taken to control glare towards drivers (Table 16.3).

16.2.4 Coordination

It is obviously important that the lighting of conflict areas should be coordinated with that of the traffic routes. Table 16.6 indicates the compatible lighting classes for traffic routes and conflict areas. Where two traffic routes lit to different classes lead into a conflict area, the match should be made to the higher traffic route class.

Table 16.6 Compatible lighting classes for conflict areas on traffic routes

Traffic route lighting class	Conflict area lighting class
ME1	CE0
ME2	CE1
ME3	CE2
ME4	CE3
ME5	CE4

16.2.5 Traffic route lighting design

Fundamental

The design process for traffic route lighting consists of the following stages:

Selection of the lighting class and definition of relevant area: the lighting class of the carriageway is selected (Table 16.1). The nature and extent of adjacent areas and any conflict areas are identified and the lighting approach to be used chosen. The compatible lighting classes for adjacent areas and conflict areas are selected (Table 16.6).

Collection of preliminary data: the following data is required before calculation can start: mounting height, luminaire type and optic setting, lamp type, initial luminous flux of lamp, IP rating of luminaire, cleaning interval planned for luminaire, pollution category for location, luminaire maintenance factor, lamp replacement interval, lamp lumen maintenance factor at replacement interval, maintenance factor, luminaire tilt, width of carriageway, width of driving lane, width of adjacent areas, luminaire transverse position relative to the calculation grid, luminaire arrangement, road surface r -table.