



Figure 19.1

For each group, a range of minimum maintained vertical illuminances is given, the value chosen for each sport depending on the maximum shooting distance

While the average illuminance is an important metric, other metrics of equal importance to sports lighting where TV cameras are to be used are those concerned with illuminance uniformity. There are five such metrics. They are as follows.

- The ratio of mean horizontal and mean vertical plane illuminances should be between 0.5 and 2.0, inclusive.
- On planes facing a sideline bordering a main camera area or facing a fixed camera position, the vertical illuminance uniformity ratio (minimum/maximum) should be equal to or greater than 0.4.
- At a single point on the four planes facing the sides of a playing area, the vertical illuminance uniformity ratio (minimum /maximum) should be equal to or greater than 0.3.
- The horizontal illuminance ratio (minimum /maximum) should be equal to or greater than 0.5.
- On large playing fields, such as football pitches, the maximum gradient in horizontal illuminance should not be greater than 25 percent every 5 m.

As for light source colour properties where television is used, for outdoor facilities the correlated colour temperature of the light should be in the range 4,000 K to 6,500 K. Where there is little contribution from daylight, the correlated colour temperature of the lighting can be within the range 3,000 K to 6,500 K. For both outdoor and indoor facilities, the CIE general colour rendering index of the light source used should be greater than 65 and preferably have a minimum value of 80. Further advice on the lighting of sports events for television broadcasting can be found in CIE Publication 169-2005.

19.2.5 Coping with power failures

Emergency lighting is required to cope with power failures. This can take two basic forms, emergency escape lighting and standby lighting. Emergency escape lighting is designed to enable people to exit a building quickly, without panic. The requirements for emergency escape lighting are given in Chapter 8 of this *Handbook* and in SLL Lighting Guide 12: *Emergency lighting design guide*. Standby lighting for sports facilities can also take two forms. The first is safety lighting, which is designed to ensure that the event can be stopped without injury to the players. The second is continuation lighting, which is designed to enable the event to continue.