

## Chapter 19: Sports lighting

### 19.1 Functions of lighting for sports

The function of lighting for sports is primarily to make what is going on highly visible to participants and spectators, without discomfort to either. Sports can be played both outdoors and indoors. Outdoor facilities range from large multi-use stadia to village tennis courts. Indoor facilities range from multi-use sports halls to single-use swimming pools. Some sports, such as football, rugby, cricket, tennis and golf are big business while others, such as archery and curling are specialist interests. Big businesses often depend on sales of television rights for a significant proportion of their income. In such circumstances, the lighting also has to serve the needs of television transmission so that the spectators watching via a screen can see what is going on. The guidance given here is for the most popular sports. Detailed guidance on lighting for a wider range of sports can be obtained from the SLL Lighting Guide 4: *Sports lighting*. The governing bodies of some sports make their own lighting recommendations. These recommendations may exceed those given here. The recommendations given here, and in SLL Lighting Guide 4: *Sports lighting*, should be treated as minima.

### 19.2 Factors to be considered

Sports facilities come in many different forms. They can be private or public. They can be large or small. They can cater for thousands of spectators or for the players alone. The sports themselves can call for fine discrimination of rapidly moving targets or simply the ability to see a stationary target in a known position. The directions of view can vary widely from predominantly upward, as in badminton, to predominantly downward as in snooker, and anywhere in between, as in football. Despite the variability faced by the designer of sports lighting, the objectives are the same everywhere. They are:

- to facilitate a high level of performance by the players
- to enable spectators, both present and remote, to see clearly what is going on
- to enable the sport to be played after dark
- to create a safe environment for both players and spectators
- to create a comfortable visual environment for both players and spectators.

To meet these objectives it is necessary to consider many aspects of the situation. Those listed below are relevant to all sports lighting applications.

#### 19.2.1 Standard of play and viewing distance

Any sport can be played at different levels, from the completely professional to the gross amateur. Providing lighting suitable for the gross amateur in a facility used by the completely professional is a disservice to the sport. Equally, providing the lighting necessary for the professional in a facility used by the gross amateur is a waste of money. Therefore, sports lighting recommendations are divided into three classes according to the players' level of skill.

Another factor that influences sports lighting recommendations are the distances from which spectators have to view the sport. The greater the distance from which spectators view the activity and the finer the detail that has to be seen, the higher the class of lighting recommended.