

Figure 19.8
Lighting of a swimming pool

For outdoor pools, lighting is usually provided by floodlights mounted on masts around the pool. The mounting height should be such that the angle of incidence on the far side of the pool is more than 50 degrees and preferably 60 degrees.

Both indoor and outdoor pools may have underwater lighting. This reduces the effect on visibility of high luminance reflections from the water surface. Underwater lighting takes two forms, dry and wet. Dry underwater lighting has the luminaires behind watertight portholes. Wet underwater lighting has the luminaires in the water but with cables long enough so that they can be serviced from the poolside. Narrow beam floodlights are used for underwater lighting, with the beam axis aimed approximately 10 degrees above the horizontal. Almost total internal reflection takes place at the surface of the water so there is no risk of glare to surface swimmers, judges or spectators. Underwater lighting should not be used for races or for water polo.