T&RA Guidelines for the Lighting of Real Tennis and Rackets Courts

Primarily, there are four main objectives that need to be realised in order to achieve high quality lighting in Real Tennis and Rackets courts – as follows:-

- 1) A system that gives high average levels of light over the entire floor area.
- 2) A pattern of lights up in the roof that gives the minimum difference that can be achieved between the brightest area and the least bright area on the court, i.e. achieves as even a level of light as possible.
- 3) A system that gives minimum background glare from the lights when players look up at an angle to volley.
- 4) A system that gives minimum reflected glare off the floor when players are hitting half-volleys or groundstrokes.

Each of these objectives is important. Not addressing any one of them can lead to unsatisfactory overall lighting, even if the other objectives have been achieved.

Some general observations:-

- a) Many courts with older lighting have a <u>regular</u> pattern of lights up in the roof. This almost invariably leads to <u>considerably</u> lower light levels in the corners, and along the end walls, than in the rest of the court. Yet it is in the corners that many of the most difficult shots have to be played, where presumably players would benefit from having the best light to see the ball! It is <u>vital</u> to pack more lights, (or have much more powerful lights), above the ends and corners if objective 2) above, is going to be achieved.
- b) On real tennis courts, if the pattern of lights is symmetrical with the roof, instead of being symmetrical with the floor area, the levels of light along the Main Wall will <u>inevitably</u> be less than along the Gallery Wall.
- c) The brighter the light sources are, the greater is the danger that there could be glare in the background when looking up to volley, and reflected glare off the floor when half-volleying or playing groundstrokes. This danger can be minimised by directing the light from the luminaires mainly downwards, so that minimal light goes at a wide angle direct to the eyes of a volleyer. Minimising glare can be achieved by:
 - i) recessing the lights, or
 - ii) by the use of internal baffles inside the luminaires, or having 'skirts' round the outside of the luminaires, or
 - iii) by employing 'optics' that direct the light in a desired direction, but <u>not</u> into the eyes of a player looking upwards to volley.
- d) Any problem of reflected glare off the floor can again be reduced by directing the bulk of the light downwards, as in c) above. Reflected glare can also be virtually eliminated by painting the floor surface with a matt paint.
- e) Care should be taken to ensure that the entire wall surfaces, right up to <u>all</u> out-of-court lines, are adequately lit.