



The Leisure and Cultural Services Department in Hong Kong attaches great importance to providing high quality facilities to the public.

The new swimming pool complex in Area 1 (San Wai Court), Tuen Mun, is a state-of-the-art \$790m development. Outdoor facilities include a 50x25m main pool with a 1,200 seated capacity spectator stand, a 25x15m outdoor training pool and a 25x15m outdoor teaching pool.

Thorn Lighting Hong Kong was commissioned to provide the floodlighting for this fantastic outdoor space with the aim of providing high quality task illumination.

### Glare control essential for comfort and safety

Thorn's Champion and Mundial C metal halide floodlights were chosen to illuminate the three pools. Champion is a high performance floodlight for training grounds with best in class optic control of obtrusive light. The 1kW projector incorporates a flat glass concept and an integrated visor for total control of glare and obtrusive light. Champion offers maximum optical efficiency and accurate light distribution with minimum light spill.

The Champion floodlights were applied to achieve 0.5 uniformity. This ensures there is enough variation to prevent bland uniform light but with no excessive contrasts. Visual dark spots in the pool could be dangerous in the event of a swimmer having problems.

### Products used



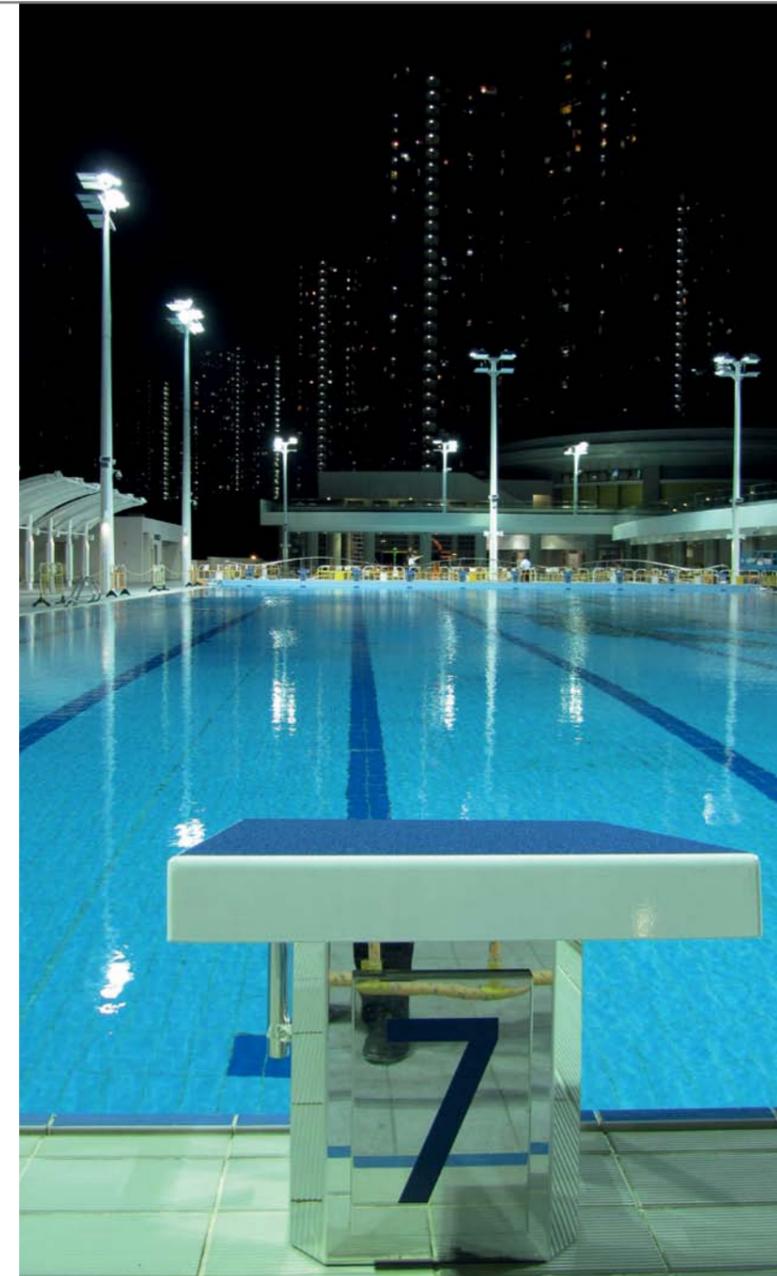
Champion



Mundial C

### Key facts

- Switched lighting levels (200, 300 and 600 lux)
- Maintenance factor - 0.68
- Glare - <56
- Luminaires designed for sustainability and end of life recycling
- Year of completion: 2012



Similarly, Mundial C is a high power and high performance floodlight specifically designed for all sport applications and large area illumination. With the lighting applied to highlight the pools' turning ends, the 1kW hot restrike lamp version was selected to ensure there is no loss of lighting, which would be dangerous for both swimmers and those surrounding the pools.

Computer optimised optical systems combined with unique optical construction ensure glare is kept to <56 on the water surface whilst lighting to the bottom of the pool for maximum swimmer safety. Excellent glare control is important to ensure pool attendants' have a good view of swimmers, as well as the comfort of spectators, the surrounding residents and local wildlife.

The quality IP65 rated luminaires and asymmetric distribution allow the fittings to be positioned on the edge of the pool for ease of maintenance and safety. Mundial C is particularly easy to install and maintain with rear access and automatic power interruption.

*Peter Thorns, Head of Strategic Lighting Applications at Thorn says: "Professional design has ensured verified compliance to all applicable standards and best practice. On-site measurement of installed performance also ensures safety and energy efficiency by providing the correct lighting levels at all times."*

For more information about Champion, go to [www.thornlighting.com/CHMP](http://www.thornlighting.com/CHMP)

For more information about Mundial C, go to [www.thornlighting.com/MUNC](http://www.thornlighting.com/MUNC)

**eControl** From Thorn's 15 ways to save energy, the following are key to minimising energy consumption at the Tuen Mun swimming pool complex:



### Luminaire distribution

Maximum efficiencies are achieved with a unique polar curve to ensure precise beam angle asymmetric distribution to light only the task area.



### Task lighting

Providing the correct amount of light for a specific set of conditions and moment in time is vital for saving energy. Switched lighting levels (200, 300 and 600 lux) enable the lighting to be adjusted according to pool use, such as closed or public or competition swimming. This ensures both efficiency and comfort for the task in hand.



### Maintenance schedule

Careful consideration has been given to the maintenance schedule to give a 0.68 maintenance factor. With a clear and realistic maintenance schedule in place, lighting performance can be optimised while ensuring maximum efficiency too.