

Philips Case Study

Eden Park shines with new Philips lighting.

Lighting the way

Eden Park is New Zealand's premier sports ground, hosting a range of international sporting fixtures. Recently the stadium underwent significant redevelopment to further complement its big-match experience, and cater for future stadium events and their different requirements.

Philips has an international reputation for lighting large-scale venues and was asked to provide a floodlighting solution that would work for both rugby and cricket as each of these codes have different lighting needs. Philips was also asked by the Eden Park Trust to present a high-impact way of illuminating the new south stand to enhance the stadium's atmosphere and ambience.

There were challenges for both projects- any new floodlighting had to be an energy efficient lighting solution that met international High Definition Television (HDTV) broadcasting standards, and which met the requirements to use the stadium roofs for mounting the floodlights rather than traditional towers. Local resident concerns about light spillage and glare also had to be considered.

For the lighting of the new south stand, the lighting solution had to showcase the architecture of the south stand without overpowering its unique design.

Devising eye-catching solutions

Based on Aurecon's design to light up the playing field, Philips provided 482 Philips ArenaVision MVF404 floodlights which were installed along the edge of the redeveloped stadium stands. The ArenaVision technology is specifically designed for outdoor sports stadiums and offers increased light output and optical efficiency, making it the perfect choice for Eden Park.

"Ensuring minimal light spillage and glare was a core requirement of the brief and was imperative given the close proximity of the stadium to residential properties. Using ArenaVision MVF404 floodlights allowed us to provide a high-quality uniform lighting system to Eden Park that could be contained within the stadium," says Philips Lighting Project Manager Allan Stephenson.

The ArenaVision MVF404 floodlights use about 10% less energy than conventional stadium lighting systems and require less maintenance, meaning a significant reduction in overall running costs.

Controlling the lighting is simple, as the Philips Dynalite lighting control system gives computer-based individual control over all the sports lighting in the stadium. This makes it easy for the Trust to switch between lighting for individual sporting codes.

To illuminate the south stand, Philips partnered with a number of companies to turn this concept into a reality including, Omar Shahab from Switch Lighting Design, Modus Lighting, and Aseco. Together they completed the concept, design and

installation. For the solution, Philips used twenty four ColorReach Powercore LED floodlights. LEDs are a highly efficient solution as they provide superior quality light while using minimal energy. Each colour LED only uses 280 watts at full output, while in comparison; conventional non-LED lighting would have required 1000w floodlights, using considerably more energy.

"The Philips Color Kinetics LED system offers virtually limitless options and allows Eden Park Trust to create spectacular colour change light shows, themed to each specific event." says Allan Stephenson.

The ColorReach Powercore floodlights are controlled by a Philips' iPlayer 3, which has a colour palette of over 360,000 colours to utilise, along with show authoring software that allows Eden Park Trust to create and manage light shows using fully customised effects. For the 2011 Rugby World Cup, each side of the south stand was illuminated with the two teams' colours, and the light effects were programmed to change dynamically.

The results

Eden Park Trust is thrilled with the way Philips produced multiple solutions for the projects that exceeded all expectations.

"Working with Philips has been extremely rewarding, they are proactive and brought a range of design and capability expertise which added enormous value to the end result. Philips was able to go beyond what we thought was possible while staying within budget and this is testament to their professionalism and experience," says Tracy Morgan, General Manager Sales & Marketing for Eden Park Trust.

"Creating a solution for the south stand that was visually interesting was important to us, it needed to have the wow factor and Philips delivered exactly what we were looking for. The solution provides a visual spectacle for people passing by or attending the games and adds to the atmosphere."

The new lighting adds to the ambience and experience of going to Eden Park. The LED lights can be used to enhance all future events, with special lighting formulas devised for the Super 15 rugby competition.





