

# THORN

LIGHTING PEOPLE

## Case Study

Brentford Football Club, UK



## Case Study:

### Brentford Football Club lighting meets all the standards now



#### Background and lighting objectives

Based in the London borough of Hounslow, Brentford Football Club is a professional football club playing in the Football League Championship. Since 1904 the club has played its home games at Griffin Park football ground. Griffin Park is situated in a predominantly residential area and has a capacity of 12 300 football fans.

In the 2014/15 Season Brentford reached the Premier League playoffs for the first time. The club therefore contacted electrical contractors SPE Engineers to increase the stadium's electrical capacity and lighting levels, which saw an average illumination of just 598 lux (2013-14 Season it was 426 lux).

#### Lighting objectives

Brentford Football Club set a target for the new lighting at Griffin Park to achieve a pitch illumination level 20% above Championship standard. Improved colour quality was particularly important for TV broadcasting.

Brentford Football Club Operations Manager, Alan Walsh, says: "Our new Brentford FC Community Stadium is planned to open in 2018 based on the projected timeline, so keeping this in mind we needed a cost-effective solution which would conform to Championship rules and regulations but also take into account the remaining lifespan of Griffin Park."

Confident in Thorn's competence in lighting design and ability to provide excellent electrical and commissioning customer care, SPE Engineers approached Thorn to help commission the pitch lighting.

SPE Engineers Director, Steve Pearce, explains: "Given the layout and design of the stadium we needed to increase lighting levels to initially a minimum of 1000 lux at pitch level. However, we could only use the existing four floodlight towers."

#### Lighting solution

Steve continues: "The project required careful design and specification. We did this by working with our Thorn Account Manager Noel Whiffin and leveraging Thorn's extensive experience to design a system that would squeeze the maximum effect from the site constraints."

Thorn Account Manager, Noel Whiffin, explains: "Thorn's 2kW Altis and Mundial floodlights were installed on the four existing 40m masts. 92 Altis floodlights with a symmetric distribution provide the bulk of the illumination while 8 Mundial floodlights provide asymmetric lighting with a low tilting angle to illuminate the corners. The floodlights were selected on the basis of providing the best solution from a lighting design aspect as well as the geometry of the stadium."

#### Products used



Altis 2kW floodlight



Mundial 2kW floodlight

#### Key facts

- Previous pitch lighting level: 598 lux average
- New pitch lighting level: 1196 lux average (50% increase)
- Previous pitch uniformity: 0.6
- New pitch uniformity: 0.8 (33% increase)

## Results and benefits

Speaking about the new pitch lighting, Alan says: "The outcome was remarkable. We were required to provide on average lux levels of 800 lux but have achieved close to 1200 lux. This has given us the basis to have a total constant light cover throughout the field of play with minimal shadow. If Brentford Football Club is successful in achieving Premier League status prior to the new Brentford Football Club Community Stadium, then we know we have a system in place that is not far off the demands of the premiership requirements."

"Every game under the new floodlights at Griffin Park gives the supporters and visitors a warm feeling of excitement. The lighting colour complements everything around the pitch activity and game, which has been evident on numerous live broadcast productions. The reaction from staff, fans, players, media and photographers is that the field of play looks excellent under the floodlights with some people even asking the question why it took so long!"

"Thorn provided the schematic plans to assure the football club that we would achieve the objective. The expertise that Thorn brought to the table then provided us with the best Thorn light fittings so that the project was not only delivered on time and within budget, but achieved more than expected."

"Thorn proved to be an excellent lighting partner and we look forward to engaging with them on future projects."

Steve adds: "As well as providing us with good quality lighting equipment we benefited from Thorn's extremely efficient customer service and industry experience. We have had dealings with other organisations within the industry but no one has come anywhere near the level of service and assistance provided by Thorn."

"I think I can safely say that SPE Engineers now has a good deal of experience and expertise in stadium lighting. Thanks to Thorn, not only have we gained experience in conventional lighting but our learning curve has given us knowledge of new technologies coming on the market."

"We have had great feedback from Brentford Football Club and are confident that new projects are well within our capabilities. This experience and knowledge has been gained with a great deal of assistance from our Thorn Account Manager and the rest of Thorn's team. We look forward to future collaborations with Thorn and welcome the opportunity to keep up to date with its latest products and services."





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