



The Northern Tennis Club Floodlight Replacement Verification Report

1 Background

This report has been produced by Mark Ruthers of Exled Ltd in response Planning Application reference 132108/FO/2021 dates 28th June 22 and specifically planning condition 4 which states:

'Prior to the use of the floodlights commencing a verification report will be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved light consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the criteria.'

This document is to verify the floodlighting installation replacing the existing external court lighting at the Northern Tennis facility has been installed and is operating in accordance with the lighting design within the approved planning permission.

2 Design documents and design intent

The lighting design documents of this permission are:

NLTC Proposed Lighting Summary dated October 2021 received 2 November 2021

NLTC Summary by Exled issued 21 February 2022

NLTC Proposed Lighting Summary by Exled issued 21 February 2022

NLTC Existing Lighting Upgrade by Exled issued 6 May 2022

The scope of the design was to allow suitable lighting for the task of playing tennis during dark hours, whilst considering specific light levels raised by the Environmental Health officer during the consultation period specifically related to the adjacent Blackburn Gardens properties.

3 Site inspection

Following on from the completion of the lighting installation I conducted a site review on Monday 16th January I attended site on Tuesday 17th January 23 to carry out my inspection of the completed installation.

The key findings of my site inspection are set out below:

- 1 From my visual inspection I can confirm the same fittings have been installed as per the design, the fittings are mounted and aimed as required
- 2 All fittings are installed perpendicular to the ground with no upwards tilt
- 3 All fittings are 4000K colour temperature
- 4 All fittings have controlled individual reflectors within the fitting body
- 5 Court G, closest to Blackburn Gardens, has lower mounted fittings with spill control plates added and the correct fitting installed.
- 6 Lighting circuit is controlled via an electronic timeclock fitted at the distribution board

The above on-site conditions are in accordance with the design noted in section 2 of this report.

A timeclock facility and additional programme back-up is in place to ensure that the lights are not in use any day beyond 10pm.

4 Post completion testing

In addition to the site inspection I also carried out some lighting measurements.

The light measurement points identified in the design on closest windows on Blackburn Gardens were not able to be accessed due to the private ownership of property.

Therefore, extrapolation of available points to measure were identified as set out below.

Light measurement planes were added in the original design to gain expected levels within the closest points of the tennis facility to enable extrapolation of expected results.

Four points were checked along the fence line in design and real life, with all real life results lower than the designed values. The testing points are indicated below (yellow circles) :



I can therefore confirm that the installation is operating within the design parameters with max readings at 21 lux in the tennis facility, expected window lux level < 9lux.

The court light measurement results are confirmed to be lower than designed results horizontally with max readings at 847 lux on the court surfaces.

5 Measures required to enable compliance

As the installation is operating within the design criteria no further measures are required.

Mark Ruthers

Lighting Designer – Exled Ltd

20th January 23