

**DESIGN AND ACCESS STATEMENT**

**REPLACEMENT FLOODLIGHTS**

**AT**

**EASTCOTE HOCKEY & BADMINTON CLUB LTD**

**KINGS COLLEGE ROAD**

**EASTCOTE**

**17 October 2022**

## Table of Contents

<b>1. Introduction.....</b>	<b>3</b>
<b>2. Background .....</b>	<b>3</b>
<b>3. Use .....</b>	<b>3</b>
<b>4. Design Proposal.....</b>	<b>3</b>
<b>5. Landscaping .....</b>	<b>4</b>
<b>6. Appearance .....</b>	<b>4</b>
<b>7. Access.....</b>	<b>4</b>
<b>APPENDIX A .....</b>	<b>5</b>

## 1. Introduction

Eastcote Hockey & Badminton Club is situated on Kings College Road. The site is located adjacent to designated playing fields and residential properties. The postal address is Eastcote Hockey & Badminton Club, Kings College Playing Fields, Kings College Road, Ruislip, Middlesex HA4 7JZ.

## 2. Background

The Design and Access Statement has been compiled as a short document to provide detail of the proposals to accompany the planning application submission for the proposed replacement of the existing outdated 25 year old floodlighting. The floodlighting is essential in allowing Eastcote Hockey & Badminton Club along with local clubs and schools and wider community to continue to use the facility during winter months and evenings.

The lighting to the sports pitch is proposed to be renewed to reduce the cost of ongoing maintenance and significantly reduce the energy consumption and running costs.

The proposal is to support the existing planning consent dated 6th November 1996 reference: 2414X/96/524.

## 3. Use

The use of the facility will continue to be used by Eastcote Hockey Club, local schools, local clubs and for community hire.

## 4. Design Proposal

The lighting design has been developed to replace the 34 metal halide luminaires on 6 existing 15m high floodlight poles with 24 LED luminaires to produce the same 350 lux light output to meet the original planning conditions.

A specialist sports lighting designer, Midstream Lighting company recommend by England Hockey and certified by our sports international governing body FIH has designed a replacement system to meet the current sports regulations and current planning consent.

The existing 34 metal halide luminaires which produce 350LUK would be replaced by 24 Modus S LED ones which will be limited to 350LUX using 50% less energy. A copy of the LED Luminaire specification is attached. Also attached is a mapping of the light overspill to demonstrate that the original planning conditions will continue to be met, there will be no additional light overspill to the adjacent dwellings.

## 5. Landscaping

There are no implications to the local trees or wildlife.

No alterations are proposed to the existing landscape.

## 6. Appearance

The existing columns will remain unaltered.

Details of the proposed light fittings are attached along with Midstream Lighting spill diagram see appendix A.

## 7. Access

No alterations to the access to and from the premises is proposed.

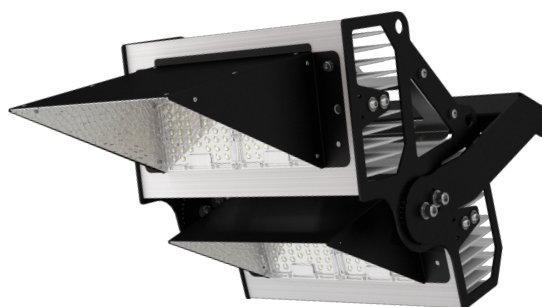
## APPENDIX A

# MODUS S

The Modus S Series is built for small to medium-sized sports applications and offers high lumen packages with greatly reduced weight.

The lightweight design minimises the number of floodlights required per mast and the uniquely designed light shields allow the Modus S to have a high level of uniformity across sports areas whilst delivering limited light spill for neighbours and residents. A great solution for both new-build and retrofit projects with features such as remote drivers for flexible installation and a 2 module configuration design to help light optimization of specific applications.

CE LED IP66  



## Technical data

Performance	
Luminaire Output	Up to 140.000 lm
Power Absorption	1100W
Lumen Maintenance [L80 B10]	>60.000h
Lumen Maintenance [L70 B50]	>100.000h

Optoelectronics	
CRI	70 - 80 - 90
Colour Temperature	<ul style="list-style-type: none"> <li>• 3000K Warm White</li> <li>• 4000K Neutral White</li> <li>• 5000K Pure White</li> <li>• 5700K Cool White</li> </ul>
Secondary Optics	weather proof, Anti-yellowing PC refraction matrix
No of LEDs	256

Luminaire Body	
Chassis and Bracket	Stainless Steel
Metal Finish	Powder Coating
Heatsinks	Anodized Extruded Aluminium (Copper Content <0.1%)
Bracket	Angled Reversible bracket, M20 or 2 x M16 Fixing points
Weight	20 Kg
Dimensions (L-W-H)	592L x 432W x 478H
Protection Level	IP66
Impact Resistance	IK09
Windage EPA	0.179 m2

Driver Unit	
Dimensions (L-W-H)	398mm-230mm-152mm
Weight	9Kg

Protection Level	IP67
Electronics	
Voltage input	200-480 VAC 50-60Hz
Active Power F.C.	0.97
Surge Protection	10kV line-earth, 6kV line-line
Insulation class	IEC Class I
Short Circuit Protection	Auto-recovery
Over Heat Protection	Drops output current

Operation Conditions	
Working temperature	-40°C / +50°C
Humidity Range	0% - 94%

## Normative reference

EN 60598-1:2008 + A11: 2009 - Luminaires - Part 1: General requirements and tests

EN 60598-2-5:2003 - Luminaires - Part 2-5: Particular requirements - Floodlights

EN 62031:2008 + A1: 2013 - LED modules for general lighting - Safety specifications

EN 62493:2010 - Assessment of lighting equipment related to human exposure to electromagnetic fields

EN 60529:1991 + A1:2000 + A2:2013 - Degrees of protection provided by enclosures (IP Code) IEC 60068-2-52 - Environmental test: Salt mist test

EN 55015: 2003 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 61547: 2009 - Equipment for general lighting purposes - EMC immunity requirements

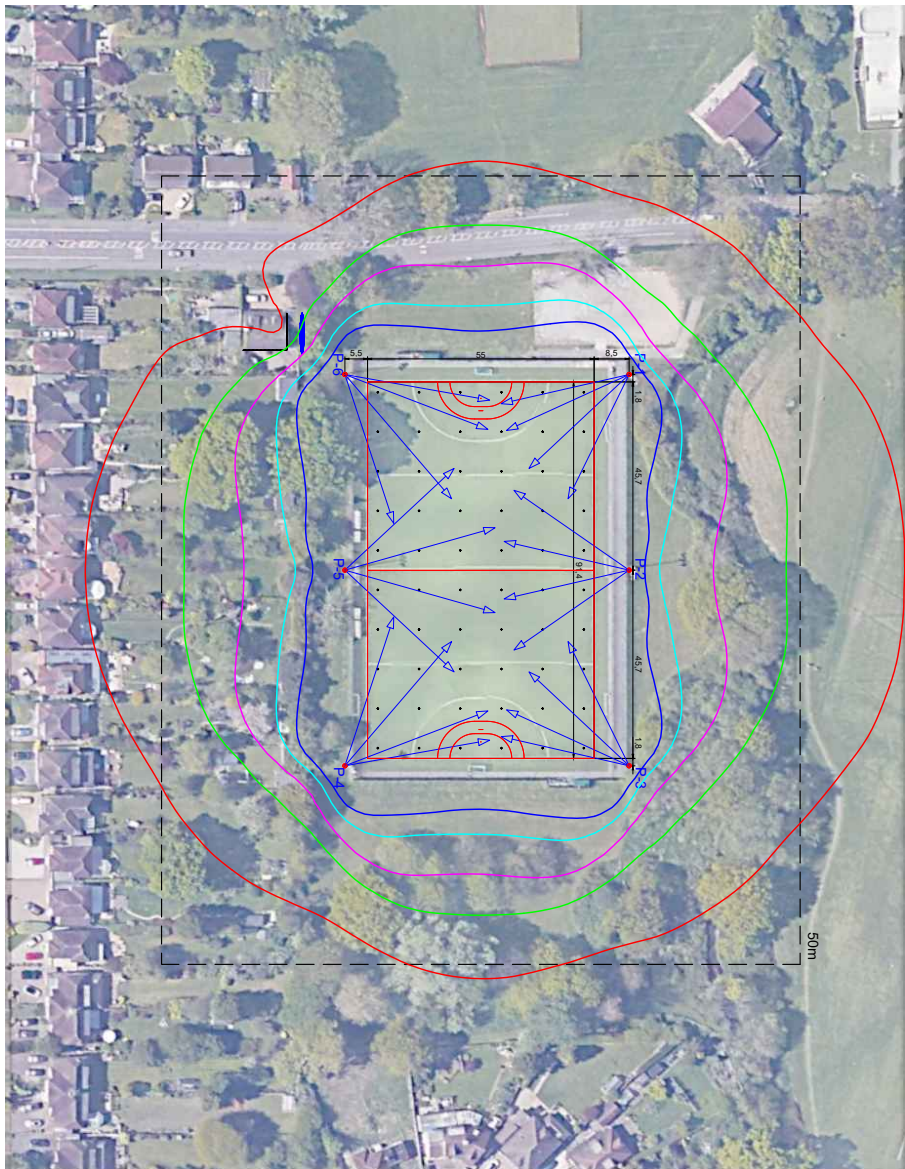
EN 61000-3-2: 2006 + A1: 2009 + A2: 2009 - Electromagnetic compatibility (EMC) -- Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

EN 61000-3-3: 20013 - Electromagnetic compatibility (EMC) -- Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.



Midstream Lighting Ltd, 1 Chesham Street, London SW1X 8ND UK  
Tel +44 207 584 8310 Email [info@midstreamlighting.com](mailto:info@midstreamlighting.com)  
[www.midstreamlighting.com](http://www.midstreamlighting.com)





- Isolines**
- 2.0 lx
  - 5.0 lx
  - 10.0 lx
  - 25.0 lx
  - 50.0 lx

**LUMINAIRES USED**

MODUS S1100		
	Net Flux	Weight
	135,500lm	20kg
	Power	
	1180W	

HM = HIGH MAST  
 $E_{av}$  = AVERAGE LUX LEVEL  
 $U_0$  = UNIFORMITY  $E_{min} / E_{av}$

FIH Calculation Grid: 10 x 6 Points		Maintenance Factor - 0.9		Total HM (All)		Total Luminaires (All)		HM = HIGH MAST $E_{av}$ = AVERAGE LUX LEVEL $U_0$ = UNIFORMITY $E_{min} / E_{av}$	
				- 6 with height of 15m		- 24 x Modus S1100 NS (5000K)			
Drawing by		Checked by		Approved by		Date		Revision	
MC		PC		MIDSTREAM		20/07/2022		03	
				ML2115 - Eastcote Hockey Club - HMs Description & Isolines				Sheet	
								212	



This drawing is property of MIDSTREAM LIGHTING Ltd. All rights reserved the partial or total reproduction of it is forbidden without express consent.