

Highlights Floodlighting Ltd

Specialist Floodlighting Installation Contractors

Manor Farm Court, Manor Road, Lower Sundon, Beds. LU3 3NZ.

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FLOODLIGHT INSPECTION REPORT

NAME OF CLUB: Northwood Football Club

CLUB ADDRESS: Northwood Park
Chestnut Avenue
Northwood
HA6 1HR

LIGHTING CONTRACTOR: Highlights Floodlighting Ltd

DATE OF INSPECTION: 3-Nov-22

TIME AT WHICH READINGS WERE TAKEN: 6-30 PM

WEATHER CONDITIONS: Fine

NUMBER OF TOWERS: 6

APPROXIMATE HEIGHT OF TOWERS: 15 metre

NUMBER OF FITTINGS: 18

TYPE OF LIGHT SOURCE: Optivision MHN-LA

MAKERS / INSTALLERS OF SYSTEM: Highlights Floodlighting Ltd

DATE OF INSTALLATION IF KNOWN: 15-Aug-02

WATTAGE PER LAMP: 2000 watt

NUMBER OF LAMPS NOT WORKING: Nil

AVERAGE LUX VALUE: 171 Lux

MAXIMUM LUX VALUE: 335 Lux

MINIMUM LUX VALUE: 85 Lux

MINIMUM / MAXIMUM UNIFORMITY: 0.25

MINIMUM / AVERAGE UNIFORMITY: 0.50

LIGHT METER WITH CALIBRATION CERTIFICATE: Konica Minolta Meter 'A'

GENERAL CONDITION OF SYSTEM: Good

COULD THE AVERAGE LUX LEVEL OF THE
INSTALLATION BE INCREASED BY FITTING
ADDITIONAL LAMPS, TAKING INTO
CONSIDERATION THE CABLE SIZES
AND EQUIPMENT: No

MARK PECKHAM
COMPANY DIRECTOR

88 POINT ILLUMINATION REPORT FOR FLOODLIGHTING SURVEY

CLUB NAME: Northwood Football Club

TEST DATE: 3-Nov-22
TIME: 6-30 PM

AVERAGE LUX LEVEL: 171 LUX

MAXIMUM LUX LEVEL: 335 LUX

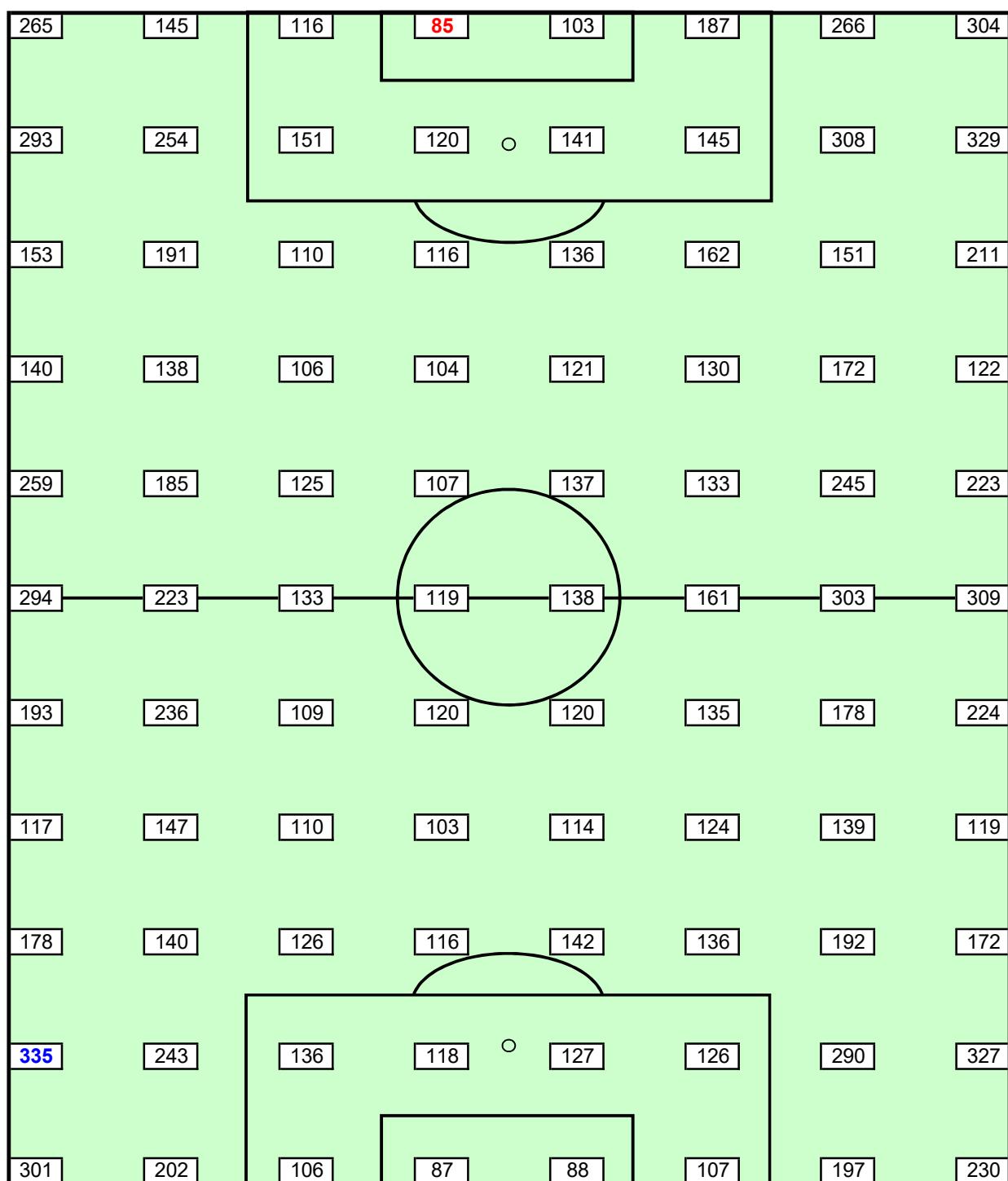
MINIMUM LUX LEVEL: 85 LUX

UNIFORMITY FACTORS

MIN / MAX: 0.25

MIN / AVG: **0.50**

SWITCHING POSITION



CERTIFICATE OF CALIBRATION

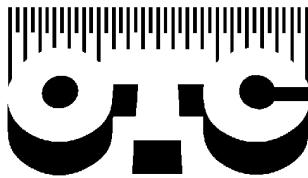
ISSUED BY OPTICAL TEST and CALIBRATION LTD.

DATE OF ISSUE: 19 April 2022

Certificate Number 138471/ACU



0286



Optical Test and Calibration Ltd.

19-23 Campus Road
Listerhills Science Park
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Approved Signatory

Name Jenny Harris

Signature QC028

Customer: Highlights Floodlighting Ltd
Unit 3 Manor Farm Court
Manor Road
LOWER SUNDON
LU3 3NZ

Equipment Information

Make: KONICA MINOLTA

Model:

T10A
T-10A

Description:

LUXMETER
SENSOR

Serial No:

20012750
30014173

Reference No:

Date of Calibration: 19 April 2022

Calibrated By: J Grabowski

This instrument has been calibrated by direct intercomparison to traceable standards in accordance with approved procedure RAD02 which follows the general principles of BS 667:2005.

The calibration was undertaken with the instrument being operated in accordance with the manufacturer's handbook where appropriate.

The uncertainties shown are consistent with the requirements of M3003 and are inclusive of the uncertainty contribution of the instrument under test. The results, statements and uncertainties relate only to the measured values as displayed by the instrument, and do not carry any implication regarding the stability of the instrument or its performance outside the measured range.

Laboratory Conditions: Temperature $21^{\circ}\text{C} \pm 2^{\circ}\text{C}$
Relative Humidity $50\% \text{rh} \pm 20\% \text{rh}$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$ unless otherwise shown, providing a coverage probability of approximately 95 %. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

CERTIFICATE OF CALIBRATION

UKAS ACCREDITED CALIBRATION LABORATORY No 0286

Certificate number
138471/ACU

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Calibration Undertaken

Illuminance in the range 1 lux to 20000 lux using a tungsten lamp at a colour temperature of 2856 K. The reference plane of the sensor was taken to be the front face of the diffuser, with a diameter of 25 mm. The zero offset has not been taken into account.
Results shown on receipt and after adjustment
Manufacturer specification: $\pm 2\% + 1$ digit of displayed value (Ref: 14328)
Results as received with no CCF factor set. Results as despatched with the CCF factor set to 1.017

Calibration Results

Calibrations marked ** in this certificate are not UKAS accredited and have been included for completeness.
Any measurements indicated as 'oos' are outside the specification used.
'pc' indicates probability of conformance to the specification used.

Calibrated by: J. Grabowski

Date: 19 April 2022

UNCERTAINTY OF MEASUREMENT

The estimated uncertainty in the measured value of illuminance from 1 lux to 20000 lux when the instrument is used under the same conditions as when calibrated is ± 1 incremental digit in the least significant figure of the displayed value due to the resolution of the meter plus:

a) $\pm 3.1\%$ in the 1.0 lux to 10.0 lux range ($k = 2.00$) b) $\pm 3.1\%$ in the 10 lux to 20 lux range ($k = 2.00$)
 c) $\pm 2.2\%$ in the 20 lux to 200 lux range ($k = 2.00$) d) $\pm 1.9\%$ in the 200 lux to 1000 lux range ($k = 2.00$)
 e) $\pm 2.2\%$ in the 1000 lux to 2000 lux range ($k = 2.00$) f) $\pm 2.3\%$ in the 2000 lux to 10000 lux range ($k = 2.00$)
 g) $\pm 2.7\%$ in the 10000 lux to 20000 lux range ($k = 1.99$)