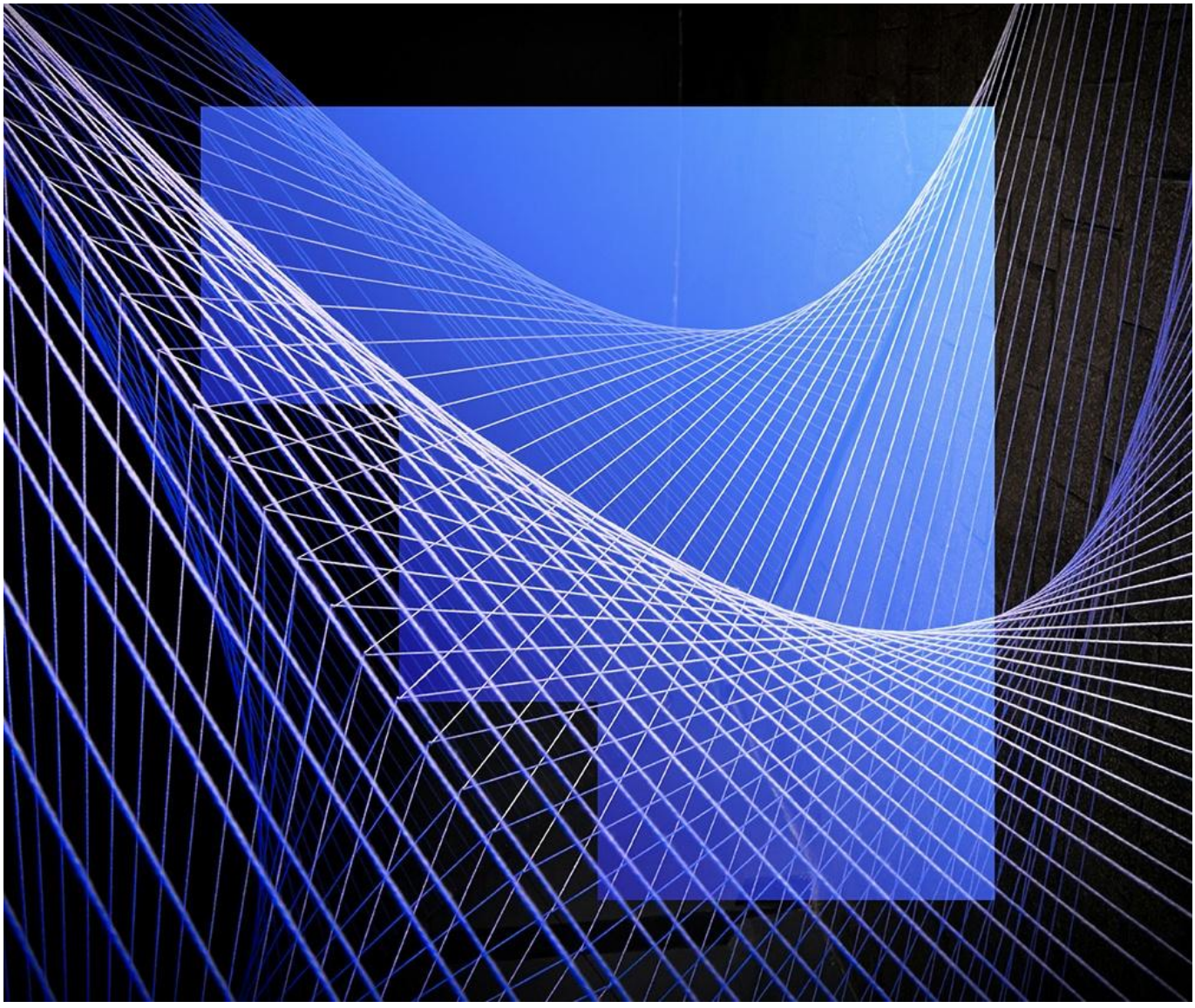
Lucid

Junction Oval Lighting Impact Assessment

Cricket Victoria
LCE106756 Rev 2
24 September 2026



Executive Summary

Lucid Consulting Australia was engaged by Cricket Victoria to undertake an independent post-installation lighting impact assessment of the sports field lighting system at Junction Oval. The assessment was completed to support the planning requirement for an independent review of the installed lighting system and to confirm whether the installation is operating in general accordance with the approved lighting design and the relevant obtrusive lighting criteria of AS/NZS 4282.

The assessment included a review of the approved Buckford Illumination Group lighting design, visual inspection of the installed luminaire arrangement, spot vertical illuminance measurements around the external perimeter of the venue, and photographic verification from within and outside the stadium. The installed luminaire locations and aiming arrangement were observed to be generally consistent with the approved design documentation, and CME confirmed that the luminaire locations and aiming angles were not altered during installation.

The spot measurements were undertaken along Fitzroy Street and Lakeside Drive during night-time conditions. Most measured vertical illuminance values were below the applicable 25 lux criterion. Two measurement points recorded values above this criterion; however, these locations were visibly influenced by existing street lighting on Lakeside Drive and are therefore not considered representative of light spill from the stadium lighting system alone. Mild humidity at the time of testing may also have increased the visible scattering of light and resulted in a conservative assessment condition.

Based on the on-site assessment, review of the approved desktop calculations, and visual verification undertaken, the installed lighting system is considered to be generally compliant with AS/NZS 4282 for the criteria reviewed. No material exceedances attributable to the Junction Oval lighting installation were identified, and no remedial measures are considered necessary based on the assessment undertaken.

Contents

1. Basis of Report 6

1.1 Introduction 6

1.2 Definitions and Terms 7

1.3 Basis of Assessment 8

2. Assessment 9

2.1 Conditions of Testing 9

2.2 Installation Audit 10

2.3 Spot Measurements 11

2.4 Photographic Verification 12

3. Conclusion 14

Appendix A 15

Appendix B 16

Appendix C 17

Schedule of Figures

Figure 1: Weather data for 18/08/2026 (weatherspark.com) 9
Figure 2: Environmental Zones (AS/NZS 4282:2019 Table 3.1) 10
Figure 3: Example of light being refracted and scattered through water 12
Figure 4: Ground conditions at the time of survey 12
Figure 5: Photos outside the stadium 13
Figure 6: Drone footage from outside the stadium 14

Schedule of Tables

Table 1: Qualifications 6
Table 2: Definitions and Terms 7
Table 3: Observed weather conditions 9
Table 4: Personnel 10
Table 5: Minimum compliance criteria from desktop calculations 10
Table 6: Spot measurements 11
Table 7: Compliance table 14

1. Basis of Report

1.1 Introduction

Lucid Consulting Australia has prepared this report on behalf of Cricket Victoria to provide an independent assessment of the recently installed sports field lighting system at Junction Oval. The purpose of the assessment is to validate the obtrusive lighting performance of the installation against the requirements of AS/NZS 4282:2023 – Control of the obtrusive effects of outdoor lighting.

Following the Port Phillip Planning Scheme report prepared by the Department of Transport and Planning in September 2025, a post-installation lighting assessment is required to confirm the installation satisfies the relevant criteria outlined below.

16. Within three months of the lighting system becoming operational for typical broadcast or streamed events, an independent lighting assessment must be carried out by a suitably qualified lighting engineer. The assessment must:
    a. Assess whether the light towers as installed comply with the design herein approved and are operating in accordance with Australian Standard AS4282:2019 – *Control of the obtrusive effects of outdoor lighting*.
    b. Include measurements taken during nighttime conditions when artificial lighting is the primary illumination source.
    c. Document any exceedances and propose remedial measures where required.
17. The lighting assessment must be submitted to the Responsible Authority within 30 days of completion. Should the assessment identify non-compliance with approved limits, remedial works must be implemented within 60 days unless otherwise agreed to in writing by the Responsible Authority.

This report was prepared by Phil Christodoulou of Lucid Consulting Australia. Phil is an Electrical Engineer specialising in sports lighting infrastructure, with almost 20 years of experience delivering projects across Australia and internationally.

Table 1: Qualifications

Name	Phil Christodoulou
Title	Associate Director
Qualifications	• Bachelor of Engineering (Electrical and Mechatronic) • Master of Business Administration (MBA-Ess) • Member Engineers Australia (MIEAust) • Chartered Engineer (CPEng/NER) • APEC Engineer • IntPE(Aus) • GAICD • IESANZ TechIES • Registered Professional Engineer – Victoria – Tasmania – New South Whales

1.2 Definitions and Terms

The following definitions and terms are provided to assist with understanding and interpreting outcomes of this report.

Table 2: Definitions and Terms

Item	Definition
Illuminance	The physical measure of illumination is illuminance. It is the luminous flux (Lumens) arriving at a surface divided by the area of illuminated surface. SI Unit: Lux (Lx), 1 Lx = 1Lm/m^2. Illuminance is generally considered in two main planes. a. Horizontal Illuminance (Eh) – The value of illuminance on a designated horizontal plane. b. Vertical Illuminance (Ev) – The value of illuminance on a designated vertical plane.
Luminance	The physical quantity corresponding to the brightness of a surface, when view from a specified direction. SI Unit: candela per m^2 (cd/m^2). Also known as “nits”.
Obtrusive Light	Spill light which, because of quantitative or direction attributes, gives rise to annoyance, discomfort, distraction, or a reduction in ability to see essential information such as transport signals.
Threshold Increment (TI)	Measure of disability glare expressed as the percentage increase in luminance contrast threshold required between an object and its background for it to be seen equally well with a source of glare present.
Upward Light Ratio (ULR)	Ratio of the luminous flux of a luminaire (or luminaire system) that is emitted, at and above the horizontal, divided by the total luminaire flux when the luminaire is mounted in its desired position.
Curfew	Time interval during which stricter requirements for the control of obtrusive light apply.
Environmental Zone	Classification of the surrounding environment under AS 4282 used to establish obtrusive lighting limits. • E1 – Intrinsically dark areas. • E2 – Low district brightness areas. • E3 – Medium district brightness areas. • E4 – High district brightness areas.
Principal Playing Area (PPA)	Defined as the area of the field where the sport is normally played. Essentially the playing zone within the field boundary.

1.3 Basis of Assessment

Section 1.4 of AS 4282 states that conformance with the Standard is typically demonstrated through design calculations and assessment of the design methodology against the relevant Lighting Technical Parameters (LTPs). Physical measurement is not required to establish conformance. In addition, Section A.4 notes that where an installation is altered in relation to equipment selection or luminaire location, it can no longer be assumed that the installation will remain compliant with the approved design documentation.

As the lighting design prepared by Buckford Illumination Group, Revision 9 dated 11 May 2026, has been assessed as compliant with AS 4282, this post-installation assessment has been undertaken on the following basis:

- Verification that the installed lighting system is consistent with the approved design documentation.
- Review of the sports field lighting measurements undertaken by CME to confirm general alignment with the lighting design intent.
- Visual review of the installation from both within and outside the venue to provide a qualitative assessment of potential obtrusive lighting effects.

2. Assessment

2.1 Conditions of Testing

2.1.1 Date and Time

On site testing as completed on Tuesday 18th of August 2026, between 7.00pm and 8.30pm.

2.1.2 Weather Conditions

The weather conditions during testing were as summarised in Table 3 below. Weather data was obtained from the Bureau of Meteorology. Further weather data for the day can be obtained from - https://deploy.weatherspark.com/d/144227/8/18/Average-Weather-on-August-18-in-Melbourne-Victoria-Australia.

Table 3: Observed weather conditions

Mean Temperature	11°C
Relative Humidity	48%
Dew Point	8.7°C
Wind Conditions	11kph SW
Rainfall	0mm

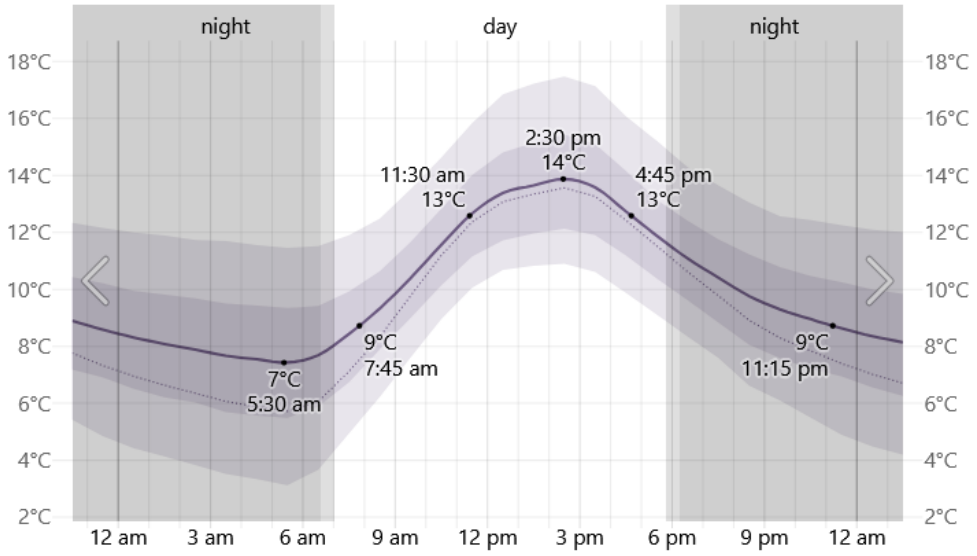


Figure 1: Weather data for 18/08/2026 (weatherspark.com)

2.1.3 Personnel

The following personnel where present during the lighting assessment as shown in Table 4.

Table 4: Personnel

Phil Christodoulou	Lucid Consulting Australia
Shaker Aguganaia	CME Group
Jonathan McGleish	CME Group
Trevor Duncan	Buckford
Yuri Golod	Buckford
Anderson Wang	Buckford

2.2 Installation Audit

2.2.1 Lighting Design

The lighting design completed by Buckford on 11 May 2026 (Revision 9), showed compliance with the AS/NZS 4282:2019, based on **A4 – High District Brightness, Non-Curfew L1**. The results of those calculations are summarised in Table 5 and shown in Appendix A.

Environmental zones	Ambient light conditions	Descriptions/ Examples
A0	Intrinsically dark	UNESCO Starlight Reserve. IDA: Dark Sky Parks, Reserves or Sanctuaries Major optical observatories Other accreditations for dark sky places for example astrotourism, heritage value, astronomical importance, wildlife/ecosystem protection Lighting for safe access may be required
A1	Dark	Relatively uninhabited rural areas (including terrestrial, marine, aquatic and coastal areas) Generally roadways without streetlighting through rural areas
A2	Low district brightness	Sparsely inhabited rural and semi-rural areas Generally roadways without streetlighting through suburban, rural or semi-rural areas other than intersections
A3	Medium district brightness	Suburban areas in towns and cities Generally roadways with streetlighting through suburban, rural or
A4	High district brightness	Town and city centres and other commercial areas Residential areas abutting commercial areas Industrial and Port areas Transport Interchanges
TV	High district brightness	Vicinity of major sport and event stadiums during TV broadcasts
NOTE Zones A0 and A1 would normally have a minimum area of 50 ha.(0.5 km^2). There may be smaller environmentally sensitive areas.		

Figure 2: Environmental Zones (AS/NZS 4282:2019 Table 3.1)

Table 5: Minimum compliance criteria from desktop calculations

Criteria	Maximum	Pass/Fail
E_v max	25 Lux	✓
Threshold Increment (TI)	20%	✓
Adaption Level (L_{ad})	5 Cd/m^2	✓
Upward Waste Light Ration (UWLR)	3%	✓
(Luminance) I_{max} per luminaire	100,000 Cd	✓

2.2.2 Luminaire Arrangement

The observed luminaire arrangement on site is consistent with the approved lighting design documentation. CME has also confirmed that the installed luminaire locations and aiming angles were not altered during installation.

On this basis, the installation is considered to be generally consistent with the Buckford lighting design, which has been assessed as demonstrating compliance with AS/NZS 4282:2023.

2.3 Spot Measurements

Spot vertical illuminance measurements were undertaken along Fitzroy Street and Lakeside Drive at a height of 1.5 m above ground level, with the meter oriented towards the stadium. As identified in Table 5, the applicable maximum vertical illuminance criterion is 25 lux at the site boundaries. However, clause 3.3.2 nominates a vertical illuminance on any vertical surface of a neighbouring building of 12% of the average camera illuminance over the Principal Playing Area (PPA) at a maintenance factor of 1. Factoring this, the average camera illuminance across the PPA is 2,050 Lux, which equates to an allowable vertical illuminance on the vertical surface of a neighbouring property to be 246 Lux. The location of each measurement point referenced in Table 6 is shown in Appendix B, together with the location of adjacent street lighting. Overall, the measured values were within the AS/NZS 4282 limits, with the exception of Points 5 and 8. However, the measurement points highlighted in green were visibly influenced by existing street lighting within the field of view at the time of measurement.

Table 6: Spot measurements

Point	E_v (Lux)	Comments
1	8.1	No observable impact of street lighting from behind.
2	7.6	No observable impact of street lighting from behind.
3	21.9	Possible minor impact of street lighting from Punt Road/Princess Highway intersection.
4	15.4	Measurement taken to reflect impact of street lighting from Fitzroy Street as a basis of comparison.
5	**38.3**	Measurement was taken through existing street lighting on Lakeside Drive, and therefore impacted.
6	16.7	Measurement was taken through existing street lighting on Lakeside Drive, and therefore impacted.
7	16	Measurement was taken through existing street lighting on Lakeside Drive, and therefore impacted.
8	**56.1**	Measurement was taken through existing street lighting on Lakeside Drive, and therefore impacted.

Another factor considered during the assessment was the presence of mild humidity at the time of testing. Humidity can make the distribution of light more visible to observers by increasing the scattering of light through moisture particles suspended in the air.

This diffusion effect can reduce horizontal illuminance, while also increasing perceived vertical illuminance as water particles refract and scatter light in multiple directions, as illustrated in Figure 3. On this basis, the measured vertical illuminance values are considered to represent a conservative condition, as the humidity present during testing may have contributed to increased visible light spill.

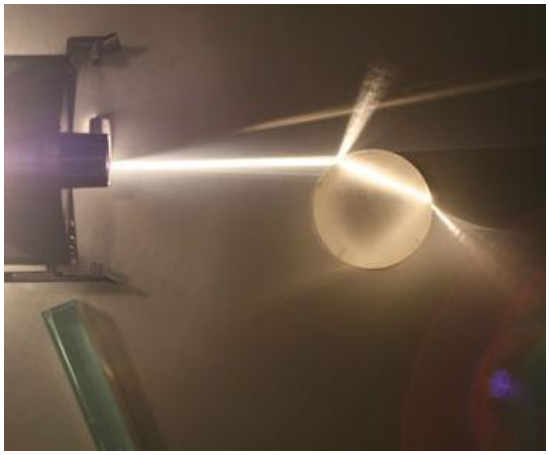


Figure 3: Example of light being refracted and scattered through water

2.4 Photographic Verification

2.4.1 Stadium Conditions

The stadium conditions at the time of the survey were consistent with the weather conditions noted in Section 2.1.2, with clear skies, no precipitation, and no visible dew present.

No light spill into the playing surface was observed from scoreboards, field-of-play signage, or similar sources at the time of the survey.

Figure 4: Ground conditions at the time of survey

2.4.2 Light Towers

The light towers appear to have been installed in accordance with the Buckford lighting design, with the luminaires positioned and aimed generally consistent with the approved design documentation.

The photographs in Figure 5 illustrate the distribution of light when viewed from outside the stadium, which is further observed in Figure 6 via Drone footage. The mild humidity present at the time of the survey made the direction and beam spread of the luminaires more visible, as moisture particles in the air scattered the projected light. This provided a clearer qualitative indication of potential light spill from the stadium and upward waste light.

Figure 5: Photos outside the stadium

Figure 6: Drone footage from outside the stadium

3. Conclusion

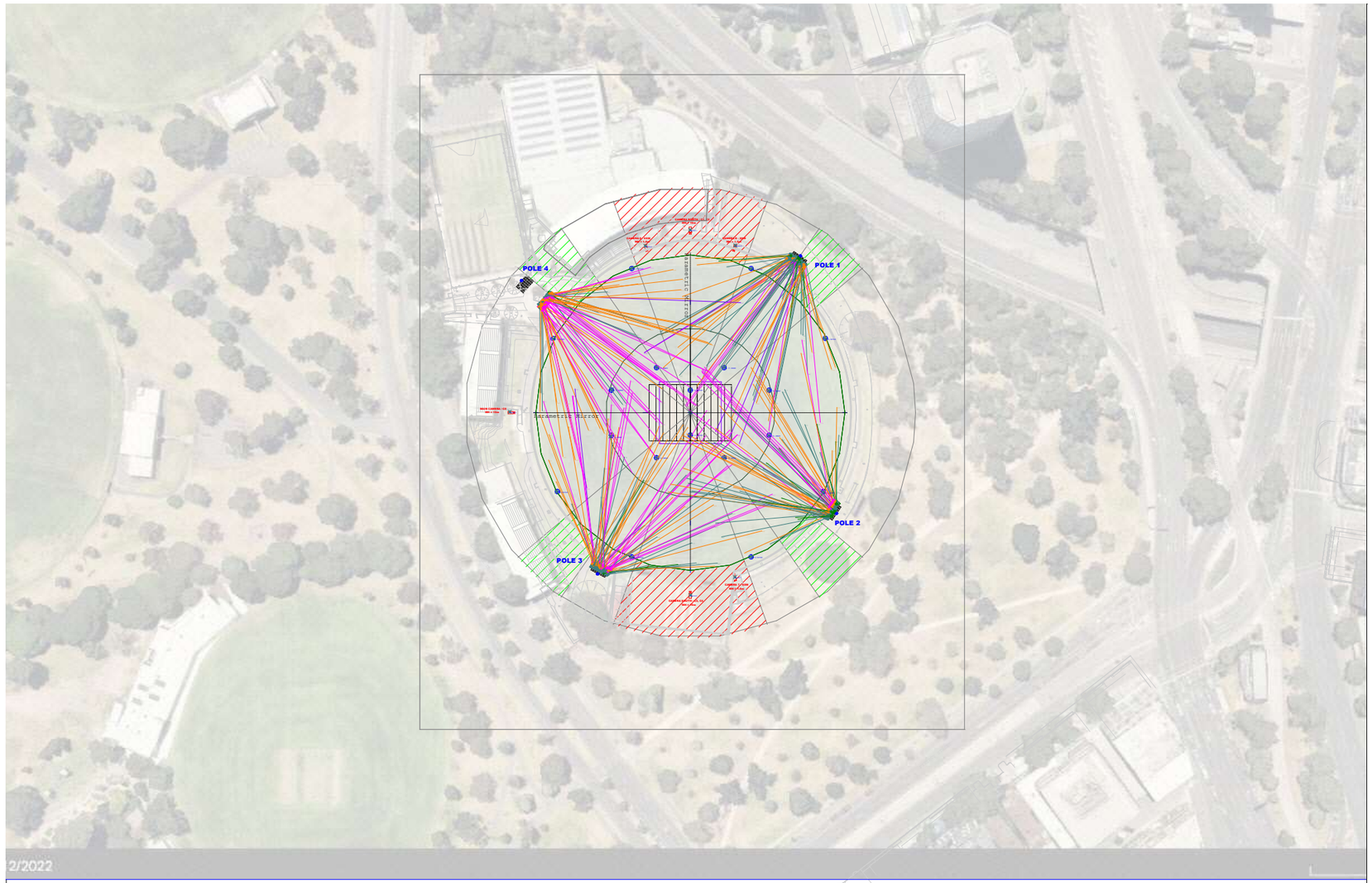
Based on the on-site assessment undertaken and review of the desktop calculations completed by Buckford, the installation is considered to be generally compliant with AS 4282 against the criteria outlined in Table 5. Responses to each of the relevant planning criteria are provided in Table 7 below.

Table 7: Compliance table

Planning Scheme Criteria	Compliance	Comment
16a	✓	Light towers have been installed in accordance with the Buckford Rev 9 design, which shows compliance with AS 4282.
16b	✓	Random spot measurements were undertaken external to the stadium, in public roadways and walkways.
16c	✓	No exceedances were observed, and therefore no remedial measures were required.
17	✓	Assessment prepared by Lucid is provided in this report for issue by Cricket Victoria to the responsible authorities.

Appendix A

Buckford Obtrusive Lighting Assessment Rev 9



OBTRUSIVE LIGHT
Not to Scale

Calculation Summary	
Project: Obtrusive	
Scenario: C1	
Label	**Max**
ObtrusiveLight_Fitzroy St_Cd_Seg1	23459
ObtrusiveLight_Fitzroy St_Ill_Seg1	14.7
ObtrusiveLight_Kings Way_Cd_Seg1	57836
ObtrusiveLight_Kings Way_Cd_Seg2	61247
ObtrusiveLight_Kings Way_Cd_Seg3	47428
ObtrusiveLight_Kings Way_Cd_Seg4	34736
ObtrusiveLight_Kings Way_Cd_Seg5	34726
ObtrusiveLight_Kings Way_Cd_Seg6	32025
ObtrusiveLight_Kings Way_Cd_Seg7	28477
ObtrusiveLight_Kings Way_Cd_Seg8	25222
ObtrusiveLight_Kings Way_Ill_Seg1	11.1
ObtrusiveLight_Kings Way_Ill_Seg2	17.7
ObtrusiveLight_Kings Way_Ill_Seg3	17.1
ObtrusiveLight_Kings Way_Ill_Seg4	17.2
ObtrusiveLight_Kings Way_Ill_Seg5	16.0
ObtrusiveLight_Kings Way_Ill_Seg6	15.7
ObtrusiveLight_Kings Way_Ill_Seg7	15.1
ObtrusiveLight_Kings Way_Ill_Seg8	17.0
ObtrusiveLight_St Kilda Rd 2_Cd_Seg1	18678
ObtrusiveLight_St Kilda Rd 2_Cd_Seg2	19077
ObtrusiveLight_St Kilda Rd 2_Cd_Seg3	13925
ObtrusiveLight_St Kilda Rd 2_Cd_Seg4	11187
ObtrusiveLight_St Kilda Rd 2_Ill_Seg1	8.1
ObtrusiveLight_St Kilda Rd 2_Ill_Seg2	2.7
ObtrusiveLight_St Kilda Rd 2_Ill_Seg3	7.5
ObtrusiveLight_St Kilda Rd 2_Ill_Seg4	0.3
ObtrusiveLight_TI_Fitzroy St	0
ObtrusiveLight_TI_Kings Way	5
ObtrusiveLight_TI_Lakeside Drive	2
ObtrusiveLight_TI_Punt Rd	0

Obtrusive Light - Compliance Report

AS/NZS 4282:2019, A4 - High District Brightness, Non-Curfew L1

Illuminance

Maximum Allowable Value: 25 Lux

Calculations Tested (13):

Calculation Label	Test Results	Max. Illum.
ObtrusiveLight_St Kilda Rd 2_Ill_Seg1	PASS	4.2
ObtrusiveLight_St Kilda Rd 2_Ill_Seg2	PASS	1.3
ObtrusiveLight_St Kilda Rd 2_Ill_Seg3	PASS	3.9
ObtrusiveLight_St Kilda Rd 2_Ill_Seg4	PASS	0.1
ObtrusiveLight_Fitzroy St_Ill_Seg1	PASS	8.3
ObtrusiveLight_Kings Way_Ill_Seg1	PASS	5.8
ObtrusiveLight_Kings Way_Ill_Seg2	PASS	9.2
ObtrusiveLight_Kings Way_Ill_Seg3	PASS	9.0
ObtrusiveLight_Kings Way_Ill_Seg4	PASS	9.1
ObtrusiveLight_Kings Way_Ill_Seg5	PASS	8.4
ObtrusiveLight_Kings Way_Ill_Seg6	PASS	8.1
ObtrusiveLight_Kings Way_Ill_Seg7	PASS	7.9
ObtrusiveLight_Kings Way_Ill_Seg8	PASS	8.3

Luminous Intensity (Cd) At Vertical Planes

Maximum Allowable Value: 25000 Cd

Calculations Tested (13):

Calculation Label	Test Results
ObtrusiveLight_St Kilda Rd 2_Cd_Seg1	PASS
ObtrusiveLight_St Kilda Rd 2_Cd_Seg2	PASS
ObtrusiveLight_St Kilda Rd 2_Cd_Seg3	PASS
ObtrusiveLight_St Kilda Rd 2_Cd_Seg4	PASS
ObtrusiveLight_Fitzroy St_Cd_Seg1	PASS
ObtrusiveLight_Kings Way_Cd_Seg1	PASS
ObtrusiveLight_Kings Way_Cd_Seg2	PASS
ObtrusiveLight_Kings Way_Cd_Seg3	PASS
ObtrusiveLight_Kings Way_Cd_Seg4	PASS
ObtrusiveLight_Kings Way_Cd_Seg5	PASS
ObtrusiveLight_Kings Way_Cd_Seg6	PASS
ObtrusiveLight_Kings Way_Cd_Seg7	PASS
ObtrusiveLight_Kings Way_Cd_Seg8	PASS

Threshold Increment (TI)

Maximum Allowable Value: 20 %

Calculations Tested (4):

Calculation Label	Adaptation Luminance	Test Results
ObtrusiveLight_TI_Fitzroy St	10	PASS
ObtrusiveLight_TI_Kings Way	10	PASS
ObtrusiveLight_TI_Punt Rd	10	PASS
ObtrusiveLight_TI_Lakeside Drive	10	PASS

Upward Waste Light Ratio (UWLR)

Maximum Allowable Value: 3.0 %

Calculated UWLR: 1.9 %
Test Results: PASS

Buckford Illumination Group
3/473 Williamstown Road,
Port Melbourne,
Victoria 3207 Australia
www.buckford.com.au

PROJECT NAME:
Junction Oval
Sports Lighting Upgrade REV9 - Class 1

LAYOUT VIEW:
Obtrusive lighting

CUSTOMER NAME:
Cricket Victoria, CitiPower Centre

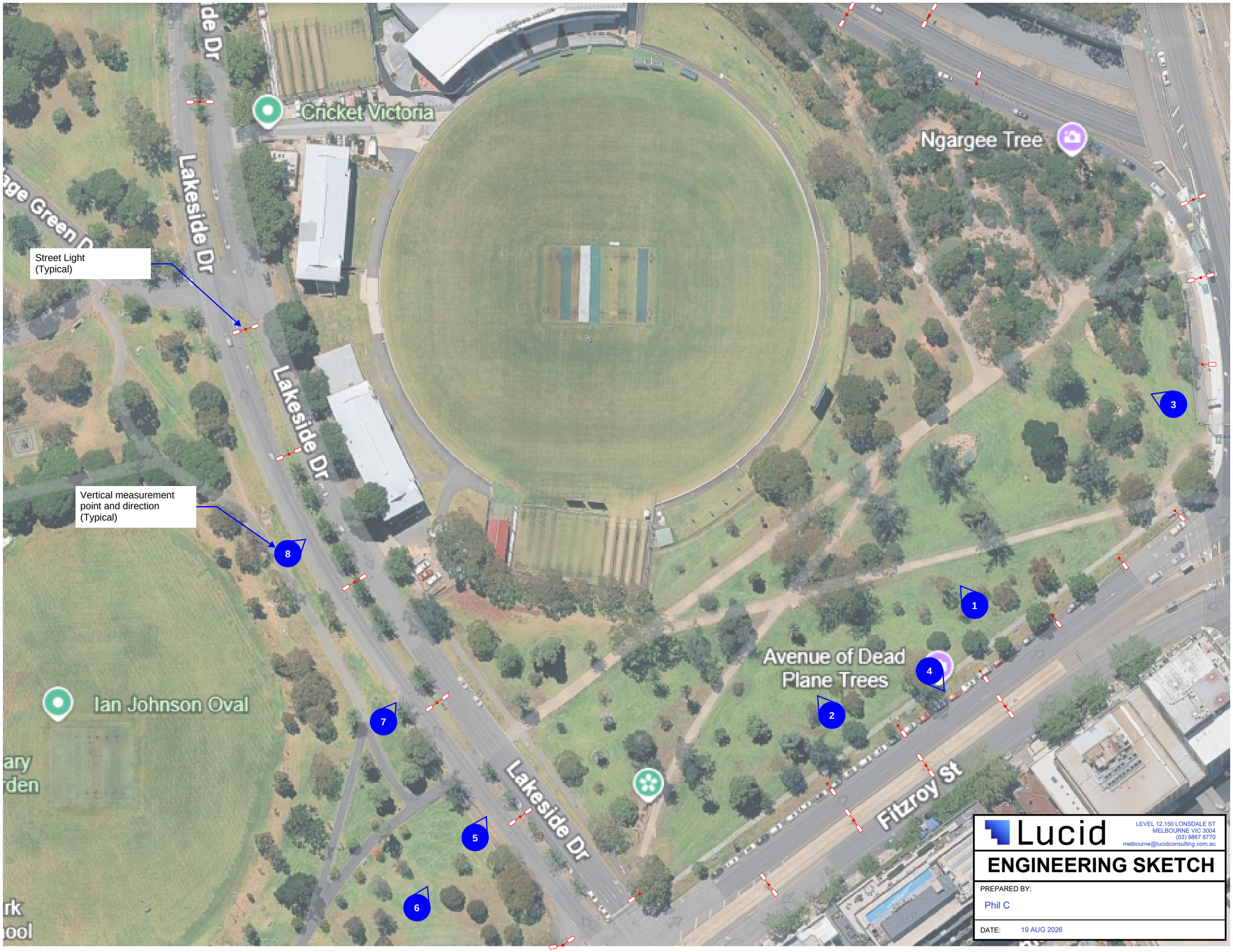
LIGHTING DESIGNER:
Yuri & Trevor

PRINT SIZE: A3

PRINTED DATE: 11/05/2026

Appendix B

Vertical Illuminance Spot Measurements



Lucid

LEVEL 12,150 LONSDALE ST
MELBOURNE VIC 3004
(03) 9867 8770
melbourne@lucidconsulting.com.au

ENGINEERING SKETCH

PREPARED BY:

Phil C

DATE: 19 AUG 2026

Appendix C

Buckford Lighting Commissioning Assessment

Buckford
Illumination Group

Commissioning Lux Level Results

Date - 17/08/2026, 6pm to 10pm

Location - Jnuction Oval

Staff - Yuri G, Trevor D, Anderson W, CME Team

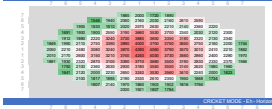
Calculation Summary				Measured @100%			Expected @90%			Expected @90%	
Label	Req Lux	Req u1	Req u2	Avg	Max	Min	Avg	Max	Min	Min/Avg	Min/Max
Cricket_Eh WICKET	3750	0.8	0.7	4168	4114	3457	3751	3703	3111	0.8	0.8
Cricket_Eh INNER	2750	0.8	0.7	3452	4000	2630	3107	3600	2367	0.8	0.7
Cricket_Eh OUTER	1000	0.7	0.5	2152	3190	1546	1937	2871	1391	0.7	0.5
Cricket_Ev Main Camera WICKET	2500	0.8	0.7	2878	3050	2720	2590	2745	2448	0.9	0.9
Cricket_Ev Main Camera INNER	1800	0.7	0.6	2246	2870	1583	2022	2583	1425	0.7	0.6
Cricket_Ev Main Camera OUTER	1200	0.7	0.5	1395	2110	808	1255	1899	727	0.6	0.4
Cricket_Ev Cam 1+2 WICKET	2500	0.8	0.7	3055	3280	2830	2750	2952	2547	0.9	0.9
Cricket_Ev Cam 1+2 INNER	1800	0.7	0.6	2610	3290	2050	2349	2961	1845	0.8	0.6
Cricket_Ev Cam 3+4 WICKET	2500	0.8	0.7	2858	2970	2740	2572	2673	2466	1.0	0.9
Cricket_Ev Cam 3+4 INNER	1800	0.7	0.6	2495	2980	1750	2245	2682	1575	0.7	0.6
Cricket_Ev Zcam 6 Slo Mo North WICKET	2500	0.8	0.7	2885	3010	3010	2597	2709	2709	1.0	1.0
Cricket_Ev Zcam 6 Slo Mo South INNER	1800	0.7	0.6	2244	2810	1770	2020	2529	1593	0.8	0.6
Cricket_Ev Zcam 7 Slo Mo North WICKET	2500	0.8	0.7	2775	2870	2710	2498	2583	2439	1.0	0.9
Cricket_Ev Zcam 7 Slo Mo South INNER	1800	0.7	0.6	2240	2630	1527	2016	2367	1374	0.7	0.6

Buckford
Illumination Group

Commissioning Lux Level Results
Date - 17/08/2026, 6pm to 10pm
Location - Junction Oval
Staff - Yuri G, Trevor D, Anderson W, CME Team

40	PASS
0	FAIL
2	MARGINAL
42	TOTAL

CRICKET MODE - Eh - Horizontal TPA



	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average			1,580 lux	2,304.00	
Minimum			1,146 lux	1,391.40	
Maximum			2,160 lux	3,110.40	
Uniformity - Un			0.73	0.60	
Uniformity - Ua			0.72	0.59	

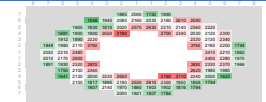
CRICKET MODE - Eh - Horizontal WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	3750	3769	4,187.78	3,770.00	PASS
Minimum		3451	3,835.00	3,454.00	
Maximum		4084	4,538.89	4,085.00	
Uniformity - Un	0.9	0.92	0.92	0.83	PASS
Uniformity - Ua	0.7	0.91	0.91	0.82	PASS

CRICKET MODE - Eh - Horizontal INNER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	3750	3783	4,203.33	3,783.00	PASS
Minimum		3517	3,907.78	3,516.00	
Maximum		4084	4,537.78	4,084.00	
Uniformity - Un	0.9	0.93	0.93	0.84	PASS
Uniformity - Ua	0.7	0.93	0.93	0.84	PASS

CRICKET MODE - Eh - Horizontal OUTER



	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	3750	3783	4,203.33	3,783.00	PASS
Minimum		3517	3,907.78	3,516.00	
Maximum		4084	4,537.78	4,084.00	
Uniformity - Un	0.9	0.93	0.93	0.84	PASS
Uniformity - Ua	0.7	0.93	0.93	0.84	PASS

CRICKET MODE - EVC5 - Main Camera Vertical at 1.5m TPA

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average			1,696.67	1,696.67	
Minimum			1,146 lux	1,146.00	
Maximum			2,160 lux	2,160.00	
Uniformity - Un			0.68	0.68	
Uniformity - Ua			0.68	0.68	

CRICKET MODE - EVC5 - Main Camera Vertical at 1.5m WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	2500	2477	2,477.50	2,229.75	PASS
Minimum		2337	2,730.00	2,446.50	
Maximum		2620	3,060.00	2,754.00	
Uniformity - Un	0.9	0.85	0.85	0.77	PASS
Uniformity - Ua	0.7	0.75	0.85	0.77	PASS

CRICKET MODE - EVC5 - Main Camera Vertical at 1.5m INNER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1800	1869	2,336.25	2,102.63	PASS
Minimum		1830	2,583.33	1,424.70	
Maximum		2007	2,510.00	2,259.00	
Uniformity - Un	0.7	0.77	0.92	0.77	PASS
Uniformity - Ua	0.6	0.59	0.59	0.53	PASS

CRICKET MODE - EVC5 - Main Camera Vertical at 1.5m OUTER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1200	1170	1,316.25	1,053.00	PASS
Minimum		860	956.00	727.20	
Maximum		1530	2,170.00	1,566.00	
Uniformity - Un	0.7	0.69	0.69	0.62	MARGINAL
Uniformity - Ua	0.5	0.59	0.59	0.53	MARGINAL
					RESULTS MATCH CALCULATION

CRICKET MODE - EVC1+2 - Main Camera Vertical at 1.5m WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	2500	2504	2,504.17	2,254.50	PASS
Minimum		2313	2,630.00	2,547.00	
Maximum		2653	3,090.00	2,804.00	
Uniformity - Un	0.9	0.92	0.92	0.83	PASS
Uniformity - Ua	0.7	0.73	0.92	0.83	PASS

CRICKET MODE - EVC1+2 - Main Camera Vertical at 1.5m INNER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1800	2123	2,610.21	2,349.19	PASS
Minimum		1981	2,000.00	1,845.00	
Maximum		2573	3,140.00	2,881.00	
Uniformity - Un	0.7	0.73	0.76	0.73	PASS
Uniformity - Ua	0.6	0.59	0.69	0.63	PASS

CRICKET MODE - EVC3+4 - Main Camera Vertical at 1.5m WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	2500	2537	2,537.50	2,283.75	PASS
Minimum		2313	2,630.00	2,547.00	
Maximum		2775	3,270.00	2,970.00	
Uniformity - Un	0.9	0.89	0.89	0.80	PASS
Uniformity - Ua	0.7	0.85	0.89	0.80	PASS

CRICKET MODE - EVC3+4 - Main Camera Vertical at 1.5m INNER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1800	2123	2,434.79	2,045.06	PASS
Minimum		1943	2,150.00	1,975.00	
Maximum		2573	2,980.00	2,682.00	
Uniformity - Un	0.7	0.73	0.76	0.73	PASS
Uniformity - Ua	0.6	0.59	0.69	0.63	PASS

CRICKET MODE - cam 6 - Slo Mo Camera 6 at 1.5m WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	2500	2481	2,480.83	2,232.75	PASS
Minimum		2313	2,630.00	2,547.00	
Maximum		2653	3,090.00	2,804.00	
Uniformity - Un	0.9	0.93	0.93	0.84	PASS
Uniformity - Ua	0.7	0.76	0.93	0.84	PASS

CRICKET MODE - cam 6 - Slo Mo Camera 6 at 1.5m INNER

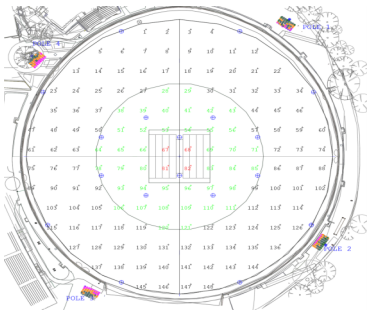
	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1800	1804	2,255.42	2,029.88	PASS
Minimum		1685	2,140.00	1,564.65	
Maximum		2029	2,810.00	2,536.00	
Uniformity - Un	0.7	0.75	0.76	0.73	PASS
Uniformity - Ua	0.6	0.58	0.69	0.63	PASS

CRICKET MODE - cam 7 - Slo Mo Camera 7 at 1.5m WICKET

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	2500	2513	2,775.00	2,497.50	PASS
Minimum		2007	2,710.00	2,459.00	
Maximum		2927	2,975.00	2,553.00	
Uniformity - Un	0.9	0.67	0.93	0.84	PASS
Uniformity - Ua	0.7	0.69	0.93	0.84	PASS

CRICKET MODE - cam 7 - Slo Mo Camera 7 at 1.5m INNER

	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1800	1940	2,239.58	2,015.63	PASS
Minimum		1452	1,527.78	1,374.30	
Maximum		2450	2,630.00	2,367.00	
Uniformity - Un	0.7	0.75	0.85	0.77	PASS
Uniformity - Ua	0.6	0.55	0.59	0.53	PASS



Commissioning Lux Level Results

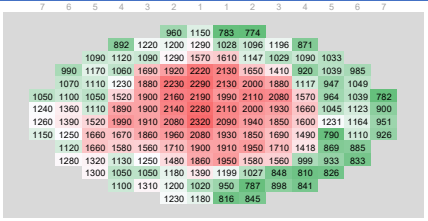
Date - 17/08/2026, 6pm to 10pm

Location - Jnuction Oval

Staff - Yuri G, Trevor D, Anderson W, CME Team

17	PASS
0	FAIL
1	MARGINAL
18	TOTAL

CLASS 1 MODE - Eh - Horizontal TPA

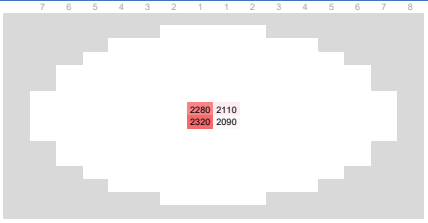


	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average			1398	1258	
Minimum			774	697	
Maximum			2320	2088	
Uniformity - U1			0.6	0.55	
Uniformity - U2			0.3	0.33	

Team -

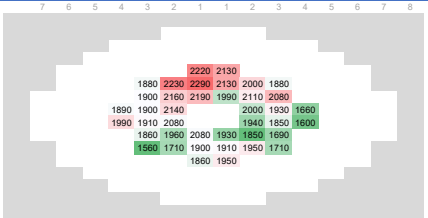
Meter -

CLASS 1 MODE - Eh - Horizontal WICKET



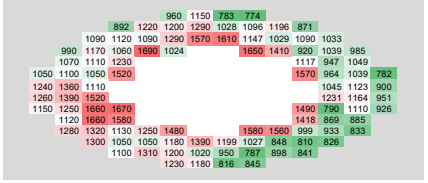
	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1500		2200	1980	PASS
Minimum			2090	1881	
Maximum			2320	2088	
Uniformity - U1	0.8		1.0	0.95	PASS
Uniformity - U2	0.7		0.9	0.90	PASS

CLASS 1 MODE - Eh - Horizontal INNER



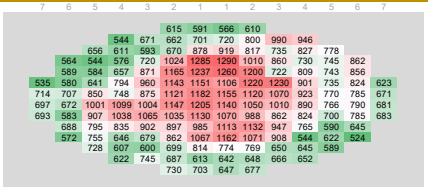
	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1500		1950	1755	PASS
Minimum			1560	1404	
Maximum			2290	2061	
Uniformity - U1	0.7		0.8	0.80	PASS
Uniformity - U2	0.6		0.7	0.68	PASS

CLASS 1 MODE - Eh - Horizontal OUTER



	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1000		1146	1031	PASS
Minimum			774	697	
Maximum			1690	1521	
Uniformity - U1	0.6		0.7	0.68	PASS
Uniformity - U2	0.5		0.5	0.46	PASS

CLASS 3 MODE - Eh - Horizontal TPA

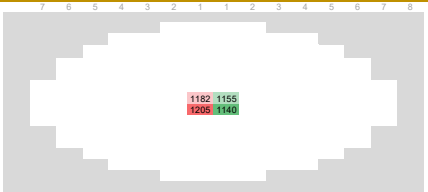


	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9
Light Loss Factor	0.9	0.9		
Average			825	742
Minimum			524	472
Maximum			1290	1161
Uniformity - U1			0.6	0.6
Uniformity - U2			0.4	0.4

Team -

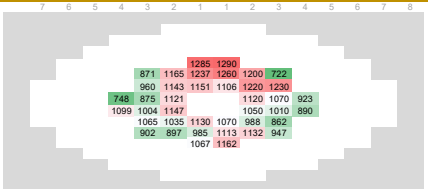
Meter -

CLASS 3 MODE - Eh - Horizontal WICKET



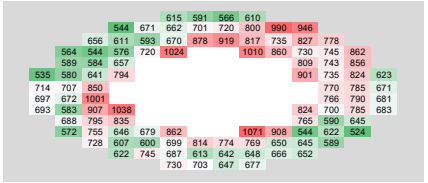
	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	1000		1171	1053	PASS
Minimum			1140	1026	
Maximum			1205	1085	
Uniformity - U1	0.75		1.0	0.97	PASS
Uniformity - U2	0.65		0.9	0.95	PASS

CLASS 3 MODE - Eh - Horizontal INNER



	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	850		1056	951	PASS
Minimum			722	650	
Maximum			1290	1161	
Uniformity - U1	0.6		0.7	0.68	PASS
Uniformity - U2	0.5		0.6	0.56	PASS

CLASS 3 MODE - Eh - Horizontal OUTER



	Target	Calculated	Measured @ MF 1.0	Expected @ MF 0.9	
Light Loss Factor	0.9	0.9			
Average	700		722	650	MARGINAL
Minimum			524	472	
Maximum			1071	964	
Uniformity - U1	0.5		0.7	0.73	PASS
Uniformity - U2	0.4		0.5	0.49	PASS