Sidelights

IES: The Lighting Society - NSW Chapter Newsletter April 2025

Sidelights is the official newsletter of the NSW Chapter of the Illuminating Engineering Society of Australia and New Zealand.

Sidelights is electronically distributed to all individual and corporate members of the NSW Chapter.

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Cover image: IES NSW Awards 2022

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President's Message

James Vlassis - President, NSW Chapter

Dear Members,

I wish you all a warm welcome to the start of the 2025 year.
They say something old is new again. The circle has turned in full revolution again.
I have the pleasure to accept the President role (2nd time) for IES NSW Chapter for 2025.

Our dedicated NSW CMC Chapter Committee is committed to working hard for the members of the IES.
We'll be promoting the good of the lighting industry.
Our dedication will undoubtedly have a positive impact for the NSW Membership.

Here are a few key strategies our team will work to support our members and elevate the IES's presence:
1. Strengthening Member Engagement
2. Professional Development and Education
3. Industry Collaboration and Networking
4. Promote Lighting Innovation
5. Advocacy and Public Outreach
6. Encouraging Diversity and Inclusion
7. Focus on Local Impact

Importantly: Highlight and celebrate the work of IES members on local projects.
Show how lighting has been used creatively in public spaces, architectural projects, or city planning in the NSW.
In closing , Our team is open to ideas and suggestions towards Technical Meetings.
Please feel free to reach out to me anytime.
Sincerely yours

James Vlassis
President
IES NSW Chapter
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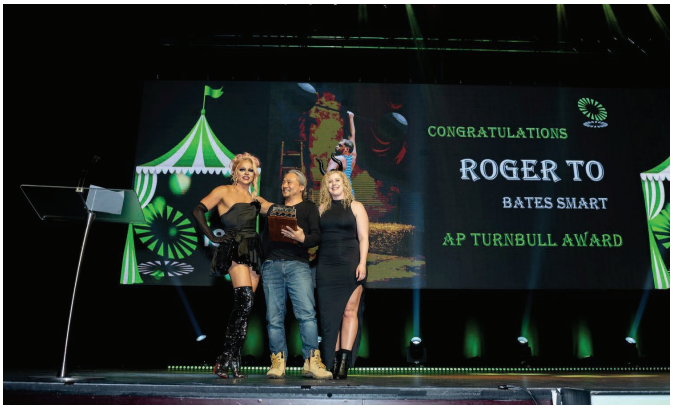
M: 0404 054 213

2024 IES NSW Awards

Ten Pin Bowling Champions – Pulvin

LiTra Award (Lighting Representative) – Brendan Harris - Lucian



AP Turnbull Award – Roger To

Richard (Dick) Chappell Memorial Award – David Lewis

5 NSW academic award – Kesnavi Parammanandhan

2024 IES NSW Awards

award of commendation – Cover blade, by Lucian

award of commendation – Global Lifestyle Brand, by Alma Lighting

award of commendation – X-Configurator, by Xero Linear Lighting

award of commendation – The Frederick, by co:lab

2024 IES NSW Awards

award of commendation
Moxy Hotel,
by Electrolight

award of commendation
Tumbalong Sound Shell,
by Electrolight

award of Commendation
Sydney Central
by Steensen Varming

2024 IES NSW Awards

award of commendation
Powerhouse Discovery Centre Castle Hill,
by Electrolight

award of commendation –
Sydney Metro Martin Place Pedestrian Link,
by Electrolight

award of commendation
Sydney Gateway Viaduct
by Aecom & Arcadis

2024 IES NSW Awards

award of commendation
W Hotel,
by Electrolight

award of commendation
Tiger Lane
by FPOV

award of Commendation
Koto Dining,
by Electrolight

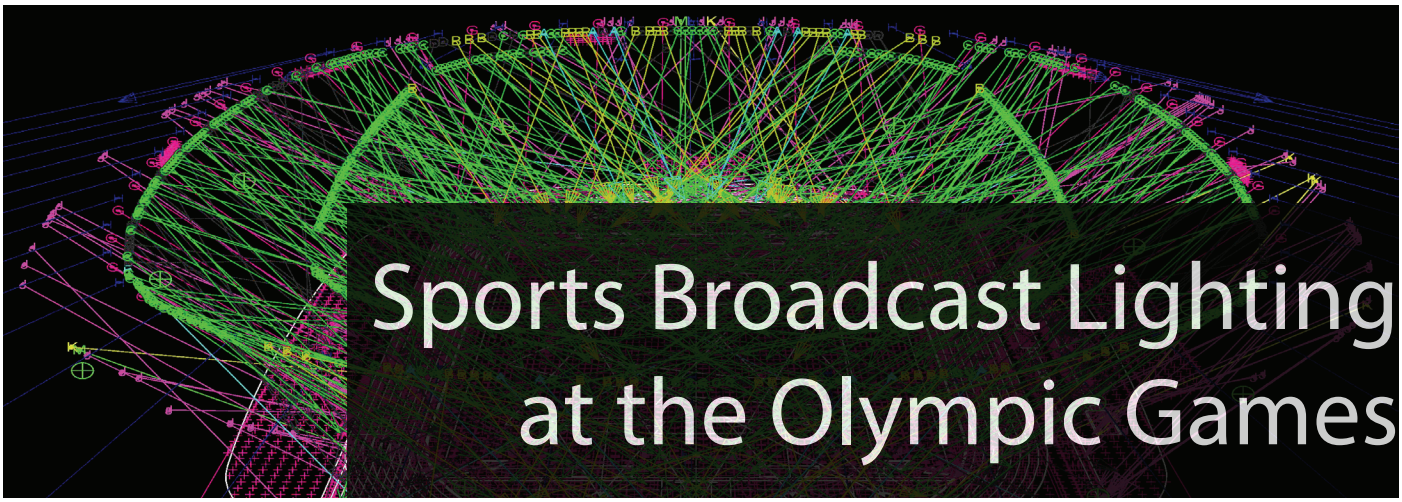
2024 IES NSW Awards

award of Excellence – National Gallery of Australia LED Upgrade by Steensen Varming

award of Excellence – St Philip's Church by Illuminated Design Australia

ies
The Lighting Society

PARIS 2024



Sports Broadcast Lighting at the Olympic Games

Beginning with Sydney 2000, this is my tenth Olympic Games - both summer and winter Games.

What's different this time is, in the previous nine I was consultant to the International Olympic Committee (IOC) broadcaster (OBS). The Olympic Games pictures seen in Australia are produced by the Olympic broadcaster and are the same as those seen in every country covering the Games.

The Olympic broadcaster produces the live television, radio and digital coverage of the Olympic and Paralympic Games. providing neutral unbiased coverage favouring no particular country or athlete. Media Rights Holders (MRHs) e.g. international TV networks acquire the exclusive rights to distribute the coverage of the Olympic Games to their home country.

I wrote all the Olympic broadcast lighting guidelines, assessed and signed off on all the lighting designs and installations at the Olympic venues and monitored the quality during the Games in the IBC (International Broadcast Centre).

But over the past few years I have also been quietly implementing a succession plan. Now my protégé has taken over completely having begun the transition during the 2020 Tokyo Games. However, I remain a consultant to the Olympic broadcaster on new sports, new trends etc.

This time, for the Paris 2024 Olympic Games, I am the broadcast lighting design director for a UK based company - one of the sports broadcast lighting design and install companies for Paris 2024.

I have previously been the lighting designer for the same company – for the 2014 Glasgow Commonwealth Games, the 2018 European Games and the 2022 Commonwealth Games.

This is the first time I have the privilege of designing the broadcast sports lighting for the Olympic Games. It's obviously an ironic twist where I am designing to my own specifications!

David Lewis
FIESANZ, broadcast lighting designer, DLLD

An independent sports broadcast lighting professional with extensive knowledge and international experience over 25 years as a designer and consultant to the host broadcaster and the organising committee of international multi-sport events, notably **ten Olympic Games** and **three Commonwealth Games.**

Broadcast lighting designer:
Olympic Games 2024 Paris – broadcast lighting design director with SLX media (UK), for 6 venues and 9 sports (including athletics, aquatics and BMX-racing)

Commonwealth Games 2022 Birmingham– broadcast lighting designer for all 16 sports; with SLX Media (official broadcast lighting supplier)

Commonwealth Games, 2014 Glasgow, Scotland – broadcast lighting designer, athletics stadium & all indoorsports.

www.linkedin.com/in/david-lewis-brd-lx

PARIS 2024

The UK company has some of the bigger and more complex Paris venues – the main stadium, Stade de France, where the track and field athletics take place plus rugby7s; and the swimming and water polo finals in the Paris La Défense Arena (the largest indoor events venue in Europe) with a temporary drop-in pool and 100% temporary overlay sports broadcast lighting.

Also, the brand-new Olympic Aquatic Centre for diving, artistic swimming and the water polo preliminaries round. Our other venues include BMX-racing, boxing preliminaries, modern pentathlon fencing qualification rounds and the shooting finals hall. There are several other training, warm-up venues and interview facilities as well as some Paralympic sports.

The iconic Stade de France stadium has its own legacy lighting specifically for football ('soccer'). So, I have had to design an overlay for the athletics – where the track and field sporting area is twice the size of football and of course many, many more cameras. The rugby 7s - staged at the same stadium – needs quite a different approach compared to broadcast lighting of football. The rugby broadcast coverage has, for example and unlike football, four special cameras - one at each corner of the field of play, including a super slomo camera (SSM) covering the dramatic action where a player dives for the corner flag.

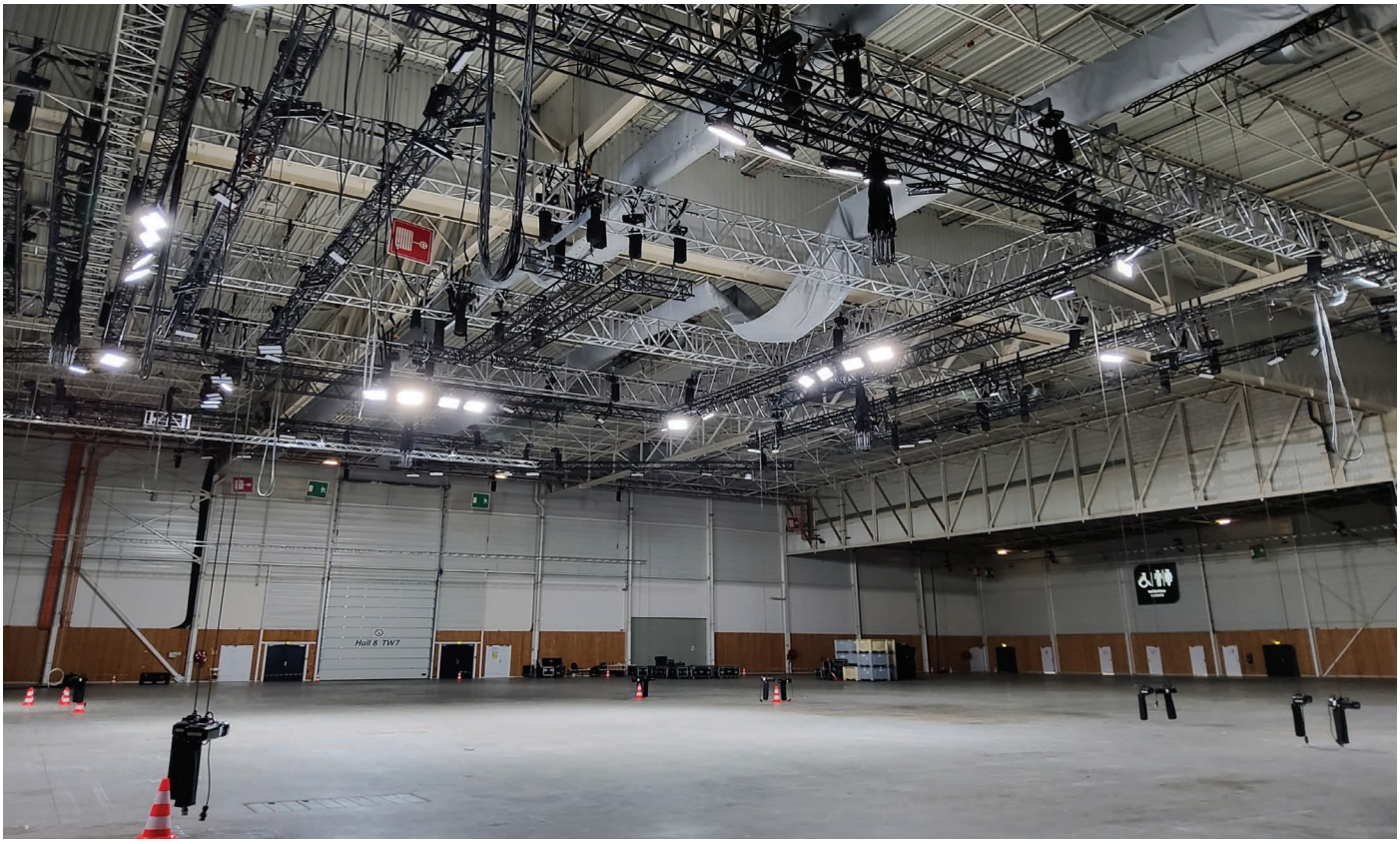
The UK company has for over 40 years specialised in innovative major UK theatre productions, live events and broadcast. A very experienced and talented organisation who, for the Olympics, also provide the lighting rigging, control systems and sports presentation lighting.

For Paris 2024, there have been some major challenges to overcome but that's usual on such a mammoth event such as the Olympics. LED lighting and its continuous evolution has played a major role in providing high quality and flexible lighting scenes.

Although I am using a large amount of innovative stadium LED sports lighting luminaires, there is an impressive quantity of studio/theatre moving head and profile spot luminaires – providing a theatrical focus.

Sometimes you just need the theatricals to get the right effect. It's an approach not new to me – I started out in the theatre business sometime in the last century. And always tried to bring that experience to my take on sports broadcast lighting. Ye old key, fill and backlight approach … modelling and contrast, light and shade etc … you know what I mean. Broadcasting sport today is very much a theatrical experience. And especially true of the Olympic host broadcaster – where storytelling and tight, expressive unbiased coverage of each athletic performance takes centre stage.

PARIS 2024



Broadcast technology has changed rapidly too. High dynamic range (HDR) and high frame rate (HFR) are the norm for such events. HDTV has given way to the ultra-high definition 4K technology – quadrupling the resolution to an astonishing 8.3 million pixels! Light sources suitable for TV too - where specifying CRI is (and has never been) of no practical use. Broadcast light sources require a high TLCI – a colour rendering metric specifically developed for broadcast lighting colour quality by the EBU and internationally adopted. Flicker – the arch enemy of super-slomo - has largely been solved in the latest LED broadcast quality luminaires. Camera lenses keep getting better now with over 120 x zoom capability of superb optics.

The Paris 2024 shooting venue is one that requires an intensive design process. Besides the many cameras, it is essential there is no glare to the shooters, no glint off the aiming sights etc … because if it's not quite right, the shooters have the perfect tool to 'remove' the offending light source – if you get my meaning?

BMX-racing has been a challenge. Taking place in an existing French countryside venue with just a saw tooth roof and no walls. It has existing lighting purely designed for horizontal illuminance - not for broadcast. This legacy lighting had to be integrated into a hybrid overlay system to meet the demands of Olympic television.

Light Technical requirements

When it comes to light technical parameters, the Olympic broadcaster has clearly defined requirements. Starting with the light source, the Olympic broadcaster's specified requirements apply to all light source technologies whether LED or HID.

Most important for Olympic TV broadcast is for light source has to support slow motion (high frame rate, HFR) production requirements and be flicker free or a maximum of <1%.

PARIS 2024

The Olympic colour temperature, Tk, preferred requirement is 5600K (standard TV camera preset) or within a range of 5000K to 7000K. The mix of colour temperatures in one venue is not permitted. Additionally, if the competition of a sport is held at two (or more) venues e.g. preliminaries and finals, the FOP broadcast lighting of each venue must have the same colour temperature.
Although specified in many standards, recommendations and guidelines, the CIE CRI Ra metric, being a human eye-based metric, is (and always has been) unsuitable for broadcast television camera systems. Now even more problematic with newer sources e.g. LED. There is no guarantee of colour rendering fidelity from a broadcast television system with the light source CRI Ra >80 or >90.

Internationally broadcasters are specifying the adoption of the TLCI as the preferred standard. The TLCI (Television Lighting Consistency Index) is a European Broadcasting Union (EBU) standard for matching luminaires and cameras. The TLCI value, Qa, is generated on a scale from 0 to 100, where 100 indicates a perfect match with the reference source, its CCT. The Olympic broadcaster specifies a TLCI Qa ≥ 85.

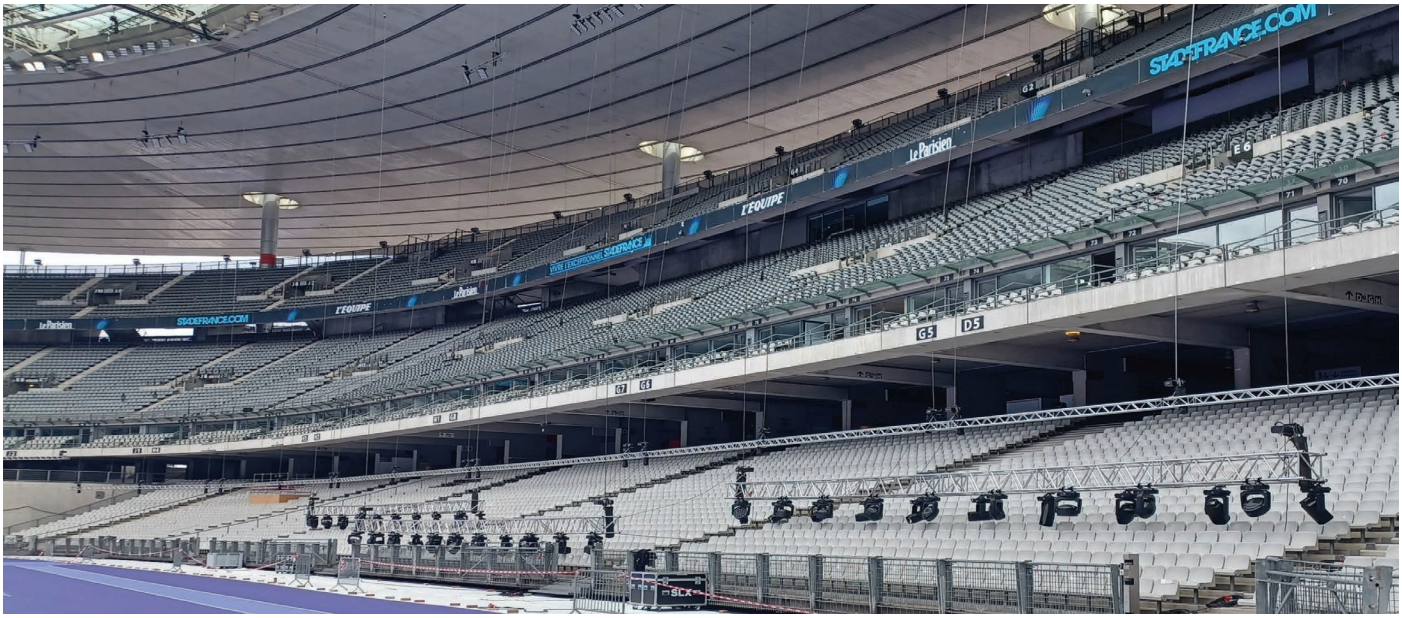
If a luminaire manufacturer has not tested for TLCI, the CIE CRI metric is accepted subject to CRI Ra ≥ 85 and R9 ≥ 45. Alternatively, CRI Re(R1-R15) ≥ 85.

If, for practical reasons (legacy, economics etc.), the spectator lighting has a different colour temperature to the field of play, the colour temperature of the spectator luminaires cannot be higher than the FOP Tk.

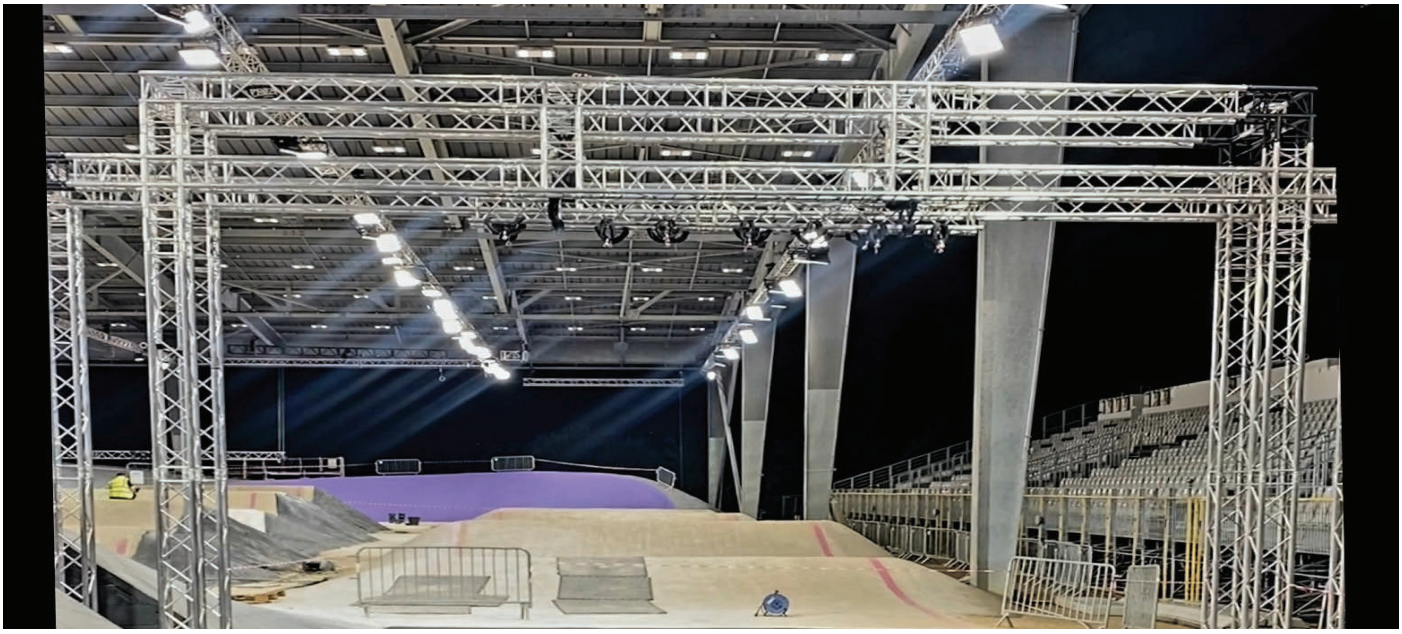
Olympic illuminance requirements, like many TV lighting international specifications, are not based on average but a minimum camera illuminance (towards a nominated camera) at any point of the FOP. The rationale is based on what broadcasters' term 'minimum useable light'. The illuminance of the corner flag for rugby for example is most important – that's commonly where the 'money shot' happens … the player diving over the line to touch the ball just inside the flag!

The minimum average camera illuminance and the average horizontal illuminance can be determined by the uniformity ratios. For HDTV/4K it is imperative the uniformities are met or exceeded. Thus the Olympic uniformity requirements are reasonably high. The minimum to average camera illuminance ratio is required to be ≥0.80 for the FOP; and the minimum to maximum camera illuminance ratio ≥0.70.

There are other more specific requirements relative to the minimum camera illuminance depending on the sport. For example, parameters to determine the contrast and modelling.



PARIS 2024



The average horizontal illuminance is determined from a permissible range of the ratio between the average horizontal illuminance of the FOP and the average camera illuminance towards the main camera. Additionally, the sporting federation usually has a specified horizontal illuminance which must be catered for.

Other important requirements are the control of glare to, not only the athletes, but importantly to the cameras. Another requirement is the prevention of skip light (reflections). The tilt aiming angle has a rigid limit – principally for cameras as well as athletes.

The Olympic lighting specifications are not available in the public domain or on any website. They are issued to an Olympic host city as part of the overall contract for the provision of suitable competition conditions at each venue and for each sport.

With the welcome feature that LED can easily be dimmed, a fined tuned lighting scene can be achieved. However, once the Olympic Games begin there can be no changes to the broadcast lighting unless the Olympic broadcaster requests a change for production reasons. In principle so-called theatrical/stage/studio show lights e.g. 'moving heads', can be used, but once set, the beam must be fixed and not be altered, dimmed, moved or changed in any way during the broadcast, including colour temperature, effects and light level.

There are several other lighting requirements specified for an Olympic venue which can be the flags-of-nations (each competing athletes' national flag is suspended within a row of the other nations); the medal ceremony and the raising of the medallists' flags, the interview zone – known as the 'mixed zone' and the athletes' entrance/exit pathways.

Once designed and installed, the lighting is first commissioned and verified as meeting the requirements of the relative international sporting governing federation via the host city organising committee and lastly checked/accepted by the Olympic broadcaster.

The Paris 2024 lighting design journey has been a privilege, and I've worked alongside very talented and experienced lighting professionals. Together our team have created lighting scenes that will contribute to the magnificent pictures being broadcast to the world by the Olympic broadcaster.

Bonjour et bon chance.

WOMEN IN LIGHTING

WIL group is open to all in the architectural + lighting industry. This is a place for exchanging ideas, providing support, planning formal/ informal gatherings and recognising the great talents of women in lighting as we strive to find balance in our personal and professional lives. Feel free to share here and invite others to join us.

I have been grateful to be inspired and encouraged by so many fantastic women throughout my life and career and I believe that this project is a great platform for continuing to support the creative potential amongst women in lighting.

LIGHT IN NATIVE LANGUAGE: #LIGHT

ILZE KUNDZINA @womeninlighting_australia

AMBASSADORS

- Women in lighting Sydney facebook page - https://www.facebook.com/share/45yFpnABENpzZwQx/
- Women in lighting linkedin page - https://www.linkedin.com/groups/13713553/
- contact for inclusvitiy and updates, Vladi Roslova –

"Please visit our facebook page and linkedin pages for upates on upcoming catch ups and events


WHEN FORM MATTERS.
To find out more about the
Clevertronics Form Exit range visit:
clevertronics.com.au/exit-lights/form
Clevertronics

IES Members Interviews

Q1. Everyone's pathway to the lighting industry has been unique; How did you first find yourself in the lighting industry?

I have always been interested in design, lighting and making - as a kid my summer holidays with my little bro would evolve around building cubby houses with materials that we found around the farm and shed. Some way more successful than others! My career began in interior design, where I spent the first ten years creating workplaces and commercial projects across the Asia Pacific. Lighting has always been a passion of mine, and I would incorporate it into my projects to create ambiance, connection, and support wayfinding. After having my daughter, I decided to follow my passion and pursued a Master of Design in Illumination at UTS. I meet Tim Carr (Arup Australasia lighting leader) while I was studying and was lucky enough to be offered a lighting design role at Arup in Sydney. Since then, I've worked on a diverse range of projects, from art installations to city-shaping masterplans and collaborated with academia on lighting research topics.

Q2. What challenges have you faced and how did you overcome these? Was there a team to support you, or a mentor?

As a bit of an introvert, changing careers and having a child were significant challenges for me, and I was honestly terrified. At the time, I didn't know many people in the industry, but Tim was very supportive as a mentor and team leader. He always made time to share his knowledge and encouraged me to build connections within the office and the lighting community. I have also meet so many creative and passionate people on my journey who have provided invaluable guidance and help me to grow as a designer.

Additionally, having a workplace that allowed me to work part-time and offered flexibility while I was studying and caring for my child meant that I could remain in the workforce.

Rebecca Cadorin

Rebecca Cadorin is an Associate lighting designer at Arup.
With a career spanning over a decade at Arup and beyond in the industry, she is a widely recognised lighting professional having worked on various multidisciplinary projects and as an exemplary leader and mentor for the next generation.

IES Members Interviews

"...equitable and sustainable lighting for people and the planet is something I think the industry could focus more on."

Q3. Your opinion of the lighting industry in Australia, where is it at? Where does it need to be?

The industry has grown significantly over the last couple of years. Sharing knowledge and continuing to educate ourselves, partners, and clients is important to ensure everyone appreciates the value of design and the overall process. For me, equitable and sustainable lighting for people and the planet is something I think the industry could focus more on. We should aim to create designs that are not only aesthetically pleasing but also environmentally responsible.

Q4. What advice would you give the next generation of lighting professionals?

Go with your passion, learn as much as possible, stay inquisitive and have fun. It will take you so many places.

I am a lighting designer and researcher with Arup in Sydney, with 20 years of experience working in the built environment. I believe that places have the power to shape and influence how we feel and am passionate about designing spaces that inspire people and create more meaningful experiences. I have extensive project experience from initial concept all the way through to commissioning and really enjoy the collaborative process with the clients, end users and other partners that is all a part of the process.

As a lighting designer I have worked on. large scale urban and infrastructure lighting projects, precinct masterplans and art installations, and have extensive experience in interior workplaces, restaurants, retail and education facilities.

My work with light and background in interior design has led me to undertaking extensive research and experiments to further understand the relationship between coloured light and human psychology. I am interested in how we can use coloured light within our environments to positively influence wellbeing within the environments we inhabit.

SYDNEY INTERNATIONAL AIRPORT
HEINEMANN DUTY FREE

How do you install a 3.6-tonne lighting feature in a highly secure international airport? This was the challenge TSA faced when redeveloping Ltd.'s flagship Mega-B retail store. Add a global pandemic to the mix, and you have the recipe for an incredibly complex piece of work.
3S Lighting was commissioned to design, a bespoke prototype, manufacture and assist with installation on the four feature golden Halo luminaires and CCTV camera light post tops.

This project is a shining example of Australian ingenuity and resilience. Working closely with TSA and Heinemann duty free design teams. 3S Lighting successfully designed, manufactured, and assisted with the installation of a stunning lighting feature in the heart of Sydney international Airport. This bespoke creation, proudly made in Australia, is a testament to the skills and dedication of local 3S lighting manufacturer and their ability to deliver world-class Architectural lighting solutions.

IES Memberships

IES NSW Financial Corporate Sponsors

Integral Lighting	www.integrallighting.com.au
Alma Lighting	www.almalighting.com.au/
City of Sydney	www.cityofsydney.nsw.gov.au
Dome Lighting Systems	www.dlslighting.com.au
Eagle Lighting - CORP NSW	www.eaglelighting.com.au
enLighten Australia	www.enlighten.com.au
Ingal EPS (NSW)	www.ingaleps.com.au
Jadecross	https://jadecross.com.au
Klik Systems Australia	www. kliksystems.com.au
Ledvance	www.ledvance.com.au
Lighting Design Partnership	www.ldp.net
LVX Global	www.lvxglobal.com
SAL Commercial	www.salcommercial.net.au
Schreder Australia	www. au.schreder.com/en
Signify Australia	https://www.signify.com/en-au
Total Electrical Connection	www. totalelectrical.com.au
Versalux	www.versalux.com.au
Webb Australia Group	www.webbaustralia.com.au

Guide to Membership

For information on how to become an IES corporate sponsor, sponsorship upgrades, pricing and benefits, visit:
www.iesanz.org/membership-info/about-membership

IES Memberships

IES NSW Financial Corporate Sponsors

ATTENTION! VALUABLE MEMBERS!

To continue enjoying all the benefits our community offers, we kindly remind you to renew your membership by paying the annual fee.

Additionally, please ensure that your email address is up-to-date on our website. This will help you receive important notifications, including exclusive member updates.

To renew your membership and update your email, simply log in to your account on our website.

Thank you for being a member, and we look forward to your continued participation!

Industry Links

LIGHTING SOCIETIES & ASSOCIATIONS

IES: The Lighting Society	www.iesanz.org
IES (Noth America)	www.ies.org
IALD	www.iald.org
International Dark-Sky Association	www.darksky.org
Lighting Council of Australia	www.lightingcouncil.com.au
Lux Pacifica	www.luxpacifica.org

EDUCATION

University of Sydney	http://www.sydney.edu.au/architecture/programs_of_study/postgraduate/illumination_design.shtml

PUBLICATIONS

Arc Lighting in Architecture	www.arc-magazine.com
DARC Magazine	www.darcmagazine.com
illumni	www.illumni.co
Lux Review	www.luxreview.com

STANDARDS & CODES

ABCB - The Building Code of Australia	www.abcb.gov.au
Green Building Council of Australia	www.gbca.org.au
Standards Australia	www.standards.org.au

Advertising in Sidelights

Suppliers of digital material are responsible for checking that all files arecomplete and correct before sending.

IMAGES

- Image types accepted are high resolution JPEGs, TIFFs and PNGs.
- Resolution: 300 dpi or better at 1:1. (the final size at which it will be used).
- Sidelights is predominately an e-newsletter so please be sure the images are in RGB colour format to ensure correct colour rendering on the monitor.

PDF FILES

- When supplying a high resolution PDF, please ensure all fonts are embedded, images are RGB and at least 300dpi.

STANDALONE LOGOS

- Any standalone logos to be supplied in the preferable format of an EPS or PNG file.
- Alternative to that would be a high resolution JPEGs or TIFFs.

MARGINS

- For PDFs, allow a 10mm margin on all edges to avoid any cropping of text or logo when printed by our readers.
- For INDD files, allow a 3mm bleed margin on all sides.

MATERIAL DEADLINE

- Please ensure that all content is submitted no leter than the 20th of each prior month to ensure sufficient time for compiling and editing.
- Please email the advertisement to the Sidelights editor with details on the issue(s) the advertisement is to be published in.

SENDING

- If your advertisement is over 5MB when attached to an e-mail please use an alternative sending service such Microsoft Dropbox or Outlook OneDrive.

Ad Size	Width x Height	Rates (per annum)
A4 Full Page	210mm x 297mm	$400 + GST
A5 Half Page	210mm x 148mm	$300 + GST
Banner	210mm x 74mm	$200 + GST

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