AUSTRALASIAN DARK SKY ALLIANCE

ADSA APPROVED LIGHTING

The Australasian Dark Sky Alliance (ADSA) is dedicated to reducing light pollution. ADSA Approved light fittings are specifically tailored for Australasian conditions and conform to dark sky principles aligned with regional standards and guidelines, including:

- **AS/NZS 4282:2019**
- **Australian Federal National Light Pollution Guidelines for Wildlife**

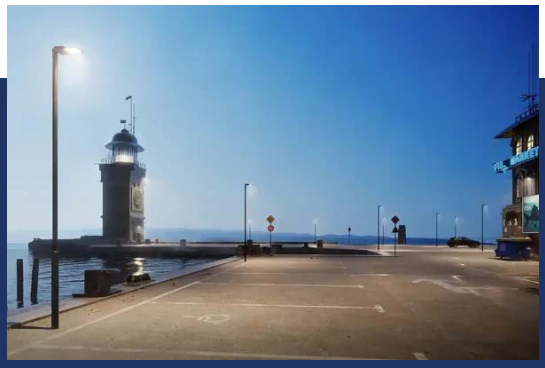
From its inception in 2019, when ADSA was first established as a charity, we have steadily built a list of luminaires suitable for responsible use. This list serves as a practical tool for councils, planners, designers, and end-users considering new lighting systems or upgrading existing installations. It ensures lighting choices that protect the night sky, ecosystems, wildlife, and human health and comfort.

Certified luminaires are available for a wide variety of uses, including:

- Post Top
- Bollard
- Wall Light
- Surface-mounted

By actively collaborating with manufacturers and suppliers we have expanded and refined a list of nearly 500 luminaires, ensuring the best technologies are being applied for our unique environmental conditions.

We are proud to see this work not only support local projects but also lift standards globally—DarkSky International has since updated their own DarkSky Approved program, more closely aligning with our ADSA program. Whilst this is great to see, users should be careful that this is not the same as ADSA Approved and therefore may not always be as appropriate a guide for the Australasian market. Consumers should also be wary of old approvals as these measures are a long way from ADSA Approved standards or those of DarkSky Approved Version 3.0. A mark of this impact can be seen in Sunshine Council, who have written into their lighting management plan that ADSA Approved lighting must be used.



How do we categorise lighting for different needs?

1. **ADSA Approved**
2. **ADSA Prized (Human Sensitive)**
3. **ADSA Prized Wildlife (Wildlife Sensitive)**

1. ADSA Approved

A luminaire delivering appropriate performance levels for dark-sky-friendly lighting designs:

- → **Upward Waste Light (UWL):** 0%
- → **Correlated Colour Temperature (CCT):** ≤3000K
- → **On/Off control required**
- → **Front & Back Very High Light (FVH & BVH):** ≤2.0% (TM-15-11 standard)

2. ADSA Prized – Human Sensitive

A higher level of performance, providing even greater control over sky glow, glare, and other environmental impacts:

- → **UWL:** 0% (in maximum adjusted up-tilt angle*)
- → **CCT:** ≤2700K
- → **In-built control****
- → **FVH & BVH:** ≤1.0% (TM-15-11 standard)

3. ADSA Prized Wildlife – Wildlife Sensitive

For areas where the needs of wildlife and ecosystems take priority:

- → **UWL:** 0% (in maximum adjusted up-tilt angle*)
- → **Amber, PC Amber, or Red LED chips**
- → **≤5000 delivered lumens**
- → **In-built control****
- → **FVH & BVH:** ≤1.0% (TM-15-11 standard)

Notes

* Adjustable luminaires are assessed at their maximum upward tilt position.
** Acceptable control includes:

- → Dimmable control gear
- → NEMA/ANSI C136.41 7-pin receptacle
- → Zhaga Book 18 module (with dimming)
- → Motion sensors, bi-level switching, or variable forward current

Definition of a Luminaire

A luminaire may include a range or family sharing the same body size and technology.

Data must be submitted for the **highest output version** being classified.

Different LED technologies = **new luminaire range.**

Each optic version requires testing (up to 5 optic versions included; additional opticss may incur higher fees).

If only part of a range is submitted, this must be clearly stated. Only approved versions may display the **ADSA Approved logo.**

ADSA Approvals Are:

- **Different from DSI Approved.** ADSA Approved are tailored to Australasian standards. DSI-approved products must apply separately but are eligible for a 60% discounted ADSA registration fee.
- **Valid for 3 years** from certification, unless significant product changes occur.
- **Assessed on a pass/fail basis:** unsuccessful luminaires receive a report outlining reasons for failure to support reapplication.

Supporting Documentation Required

- **LM80 report** for LED chip/board (with spectral power distribution if not included).
- **CIE S 025/E or IES LM-79** photometric files for all versions.
- **Technical datasheets** for luminaires and relevant control gear.

Further Requirements for Manufacturers

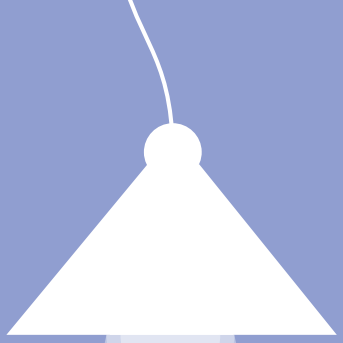
Manufacturers must also demonstrate a **commitment to reducing light pollution**, for example through:

- Mission statements
- Website or published articles
- Participation in community events

Application Fees

- Registration (ADSA Certification): $1,550 AUD (one-time fee)
- Registration (already IDA listed): $775 AUD
- ADSA Approval (per luminaire family): $375 AUD

APPLY NOW – email technical@ausdarksky.org



Background

The USA run on a 120-volt power grid and employ standards for luminaire fixtures that are specific to the US market. Australia is more closely aligned to the EU, using a 240-volt power grid and either adopting or aligning our standards to that of the EU. For this reason, fixtures that qualify under the Dark Sky International Approved scheme are not relevant to Australia or many other regions around the globe.

Process

ADSA deemed that any recommendations of luminaires as dark sky sensitive only addresses part of the problem and that this does not guarantee a good outcome. It is therefore important to ensure any such scheme ultimately ties back in to the universally agreed 5 principals of dark sky sensitive lighting—timing, direction, glare, spectral composition and shielding.

Comparison ADSA Approved & DSI Approved.

	DIRECTION Light should be directed only to where it is needed	Light should be no brighter than necessary	Warmer-colour lights should be used where possible	Fees
DSI APPROVED RESIDENTIAL	Requirement for no more than 50 lumens total UWL	≤1,000 delivered lumens. Must be dimmable to 10% or less.	≤3000K CCT	Registration: US$3,000 Annual Renewal US$500 Product testing US$200 to US$350
DSI APPROVED COMMERCIAL	<5 lumens UWL for luminaires <1000 delivered lumens. <0.5% of total lumens and < 50 lumens for luminaire >1000 delivered lumens. Type V or Type VS (Asymmetric or Quad type distributions) Front and Back Very High light (FVH & BVH*) ≤5% of total lumens. All other luminaires Front and Back Very High light (FVH & BVH*) ≤3% of total lumens. Shielding options must be available.	Must be dimmable to 10% or less.	≤3000K CCT	Registration: US$3,000 Annual Renewal US$500 Product testing US$200 to US$350
DSI APPROVED PEDESTRIAN FRIENDLY	<5 lumens UWL for luminaires <1000 delivered lumens. <0.5% of total lumens and < 50 lumens for luminaire >1000 delivered lumens. Front and Back Very High light (FVH & BVH*) ≤2% of total lumens. Maximum luminous intensity must fall at ≤68 degrees.	Must be dimmable to 10% or less.	≤3000K CCT	Registration: US$3,000 Annual Renewal US$500 Product testing US$200 to US$350
DSI APPROVED WILDLIFE TUNED	Front and Back Very High light (FVH & BVH*) ≤2 % of total lumens. Front and Back High light (FH & BH*) ≤35% total lumens. Maximum luminous intensity must fall at ≤68 degrees. Luminaires must have enhanced shielding.	≤4,000 delivered lumens. Must be dimmable to 10% or less.	Spectral power shall be at wavelengths of 560 nm or longer. *specifical rules out PC Ambre	Registration: US$3,000 Annual Renewal US$500 Product testing US$200 to US$350
	Front and Back Very High light (FVH & BVH*) ≤2 % of total lumens	No requirement.	≤3000K CCT	Registration: AUD$1,250 Annual Renewal NA Product testing AUD$350
	Requirement for 0% Upward Waste Light when installed in the maximum adjusted up tilt angle. Front and Back Very High light (FVH & BVH*) ≤1 % of total lumens	In built control.	≤2700K CCT	Registration: AUD$1,250 Annual Renewal NA Product testing AUD$350
	Requirement for 0% Upward Waste Light when installed in the maximum adjusted up tilt angle. Front and Back Very High light (FVH & BVH*) ≤1 of total lumens	≤5000 delivered lumens In built control.	Amber or PC Amber or Red LED chips	Registration: AUD$1,250 Annual Renewal NA Product testing AUD$350