



DarkSky Approved Lodging Program

Version 1.0

Introduction:

The DarkSky Approved Lodging program (hereafter, the “Program”) is established by DarkSky International to promote high-quality lighting for visitor accommodations possessing an exceptional or distinguished quality of starry nights and a nighttime environment that is preserved through onsite DarkSky approved lighting. A DarkSky Approved Lodging might include, for example, camps, seasonal campgrounds, hotels, resorts, retreat centers, facilities promoting ecotourism, or astrotourism lodges that are situated in dark sky locations.

The Program is intended to complement the award-winning International Dark Sky Places program by providing recognition to owners and/or operators that provide overnight accommodation to the public visiting dark sky locations where the Milky Way is visible. They provide opportunities for visitors to spend the night in a dark sky location—an increasingly rare experience for many of the world’s population.

For a particular facility or accommodation to be DarkSky certified, it must demonstrate that it meets the criteria in this document, which includes both technical performance specifications and administrative requirements. These criteria are based on the objectives of the Five Principles for Responsible Outdoor Lighting. Those Principles are:

1. All light should have a clear purpose.
2. Light should be directed only to where it is needed.
3. Light should be no brighter than necessary.
4. Light should be used only when it is useful.
5. Warmer color lights should be used where possible.

For questions on the program, contact the [Lighting Program Manager](#).

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1.0 Overview

- A. Scope:** This program provides DarkSky Approved Lodging certification to individual facilities at specific locations that have met the criteria explained in these guidelines. The types of facilities that are eligible for consideration include lodges, hotels, motels, campgrounds, resorts, and similar types of facilities whose purpose is to provide overnight accommodations for travelers.
- B. Goals:** This program provides certification from DarkSky International for accommodation facilities that meet the following goals:
- Exemplify excellent outdoor lighting practices and their commitment to the ideals of dark sky protection and restoration.
 - Promote ecotourism and astrotourism in a manner that enhances public understanding and enjoyment of the night sky and its heritage.
 - Promote the conservation and protection of nocturnal habitats and their associated ecological resources.
 - Foster an understanding by facility visitors that dark skies are a valuable and ever-dwindling global resource in need of urgent protection.
 - Encourage others in the sector to become leaders on dark sky protection by modeling best practices, demonstrating what is attainable, and working peer-to-peer to inspire like-minded property owners to protect dark skies at their facilities.
 - Promote and execute DarkSky's mission of educating the global public as to the difference between "good lighting" and "bad lighting," and the associated opportunities for protecting the environment, human health, and dark skies.
- C. Benefits of certification as a DarkSky Approved Lodging:**
- The designation celebrates the efforts made by a private business to protect the night sky. Achieving this distinction will encourage and ensure the sustainability of outdoor lighting that is dark sky friendly and will enhance the awareness of destination guests of the principles of environmental stewardship and responsibilities of night sky protection.
 - The designation entitles the facility owners to display the DarkSky Approved Lodging logo and to promote this distinction in its marketing and outreach collateral. In addition, DarkSky maintains a dedicated web page for the DarkSky Approved Lodging program that will serve as a resource and information guide for prospective guests.
 - DarkSky will make educational and outreach material available for use by the facility.

2.0 Program qualifications and criteria

2.1 Qualifications for consideration

To qualify for consideration as a DarkSky Approved Lodging, the candidate facility must meet the

following outcomes, which will be demonstrated by compliance with the criteria in following sections that follow:

- A. Outcome: *Sky Quality*** - The facility is located in a region with an exceptional dark sky resource.
- B. Outcome: *Habitat Identification*** - The facility understands sensitive nighttime resources and appropriate means of reducing the impact of light at night.
- C. Outcome: *Lighting Design*** - The facility minimizes light pollution by using exemplary lighting practices.
- D. Outcome: *Education and Outreach*** - The facility allows guests regular nighttime access and provides educational or outreach material about night sky conservation to guests.

Note: At its sole discretion, DarkSky may choose to not recognize a facility that meets the criteria but is proposed in a particularly sensitive location.

2.2 Program criteria

The goal of the Program criteria is to enable the Facility to achieve a set of desired outcomes.

A. Outcome: *Sky Quality*

The candidate accommodation facility (hereafter, “Facility”) must:

- a. Have a pre-certification dark sky reading of 21.2 stellar magnitudes per square arcsecond (mpsas) or greater; **or**
- b. Be located within a currently designated International Dark Sky Park or International Dark Sky Sanctuary, or within the core of an International Dark Sky Reserve.

Under qualifying dark sky conditions, the following results are typically observed:

- The Milky Way is readily visible to the unaided eye
- There are no nearby artificial light sources yielding significant glare
- Any light domes present are dim, restricted in extent, and close to the horizon

Guidance on how to measure dark sky quality is [available](#) from DarkSky.

B. Outcome: *Habitat Identification*

The Facility must have a written Habitat Identification Report (HIR) that includes the following:

- a. A list of threatened, endangered, and vulnerable species around the Facility* that identifies which are nocturnal or otherwise sensitive to human-generated light at night
- b. Steps to be taken to minimize human-generated lighting in areas within and around the Facility that are visited by wildlife, especially those species that are endangered, threatened or nocturnally active
- c. Specific plans for periodic reevaluation of the exposure of identified species to human-generated light

The HIR must identify whether there are particular wildlife species, including migratory

* The required area within which to evaluate the effect of light on wildlife should include the area within the borders of the facility plus the surrounding area out to a distance of two kilometers in all directions from the facility property border.

species, or other flora or fauna with particular sensitivities to light at night. Examples would include a bat colony, riparian species, nighttime pollinators such as moths, a firefly population, or seasonally migrating birds.

At a minimum, the application should consider publicly available databases, such as the IUCN Red List of Threatened Species[†] or other regional or country-specific databases, e.g., the United States Fish & Wildlife Service's database,[‡] or NatureServe Explorer.[§]

Mitigation measures can include removing unnecessary light fixtures, ensuring that light is not falling on sensitive locations, and/or installing controls programmed to dim and/or turn off lighting at designated times. Mitigation measures shall be included in the Lightscape Management Plan (LMP).

An example on how to develop an HIR is provided [here](#).

C. Outcome: *Lighting Design*

The Facility shall adopt and follow a Lightscape Management Plan (LMP) proportional to the amount and complexity of the Facility's lighting systems and which incorporates the [Five Principles for Responsible Outdoor Lighting](#). The points below outline the minimum requirements for the LMP. Appendix A provides further guidance.

- a. At the outset of any process involving additions or other changes to the existing lighting, the purpose of the proposed changes shall be clearly stated and consideration given as to whether they are necessary or will be helpful, including the following considerations:
 - Lighting objectives should consider the local regulatory requirements, relevant lighting standards, and identified species.
 - Consideration should be given to how indoor light affects the outdoor environment, and steps should be taken to minimize its impact, such as window shades and placement of interior light fixtures.
 - Glare from luminaires (i.e., light fixtures) should be minimized to maintain dark adaptation as much as possible; shielding the light source from view is optimal to achieve this purpose. One way to do so is to keep the light source fully shielded and below eye height.
- b. Luminaires shall be dimmable wherever possible, so that the amount of light emitted can be varied according to need.
- c. At least two-thirds of the existing lighting inventory shall conform to the LMP at the time the application is submitted.
- d. The LMP shall describe a schedule wherein 80% of the lighting inventory will conform to the LMP within two years of certification, and 100% within five years.

D. Outcome: *Education and Outreach*

The Facility shall improve the knowledge of its staff and guests regarding the night sky as a resource, the effects of light pollution, the principles of good lighting, and steps that guests can

[†] Online: <https://www.iucnredlist.org/>. (Accessed 2023 Jul 29).

[‡] Online: <https://www.fws.gov/data/>. (Accessed 2023 Jul 29).

[§] Online: <https://explorer.natureserve.org/>. (Accessed 2023 Sep 14).

take to minimize light pollution.

- a. The Facility shall ensure that all staff are knowledgeable about the Program and that all facility maintenance staff are trained on the LMP.
- b. The Facility shall provide safe viewing of the night sky or the nighttime environment to all guests.
- c. The Facility shall provide outreach materials describing the importance and value of dark skies and natural darkness, the impacts of light pollution on the environment, and actions individuals can take to address the problem.
 - Programs may be offered in collaboration with local businesses, interpreters, or volunteer astronomy groups.
 - Programs may be provided free of charge or on a paid basis.
 - DarkSky makes educational and outreach material available at cost or via digital download.
- d. If the Facility routinely provides programs for guests to attend, these shall include programs related to the night sky and/or nighttime environment.
- e. Once certified, the Facility shall have signage indicating it is a DarkSky Approved Lodging.

3.0 Application and review process

3.1 Steps for applicant

- A. Review** the program guidelines (see **Section 2**).
- B. Pre-application.** Submit a pre-application form and pay the pre-application fee. This will open a case file with DarkSky and secure the Facility's ability to apply under the current guidelines for 12 months. As part of the pre-application process, Facilities are required to submit their Lighting Inventory and preliminary LMP with the completed Pre-application form (see **Appendix A**). Applicants are encouraged to submit all pre-application materials prior to beginning work on any retrofits. DarkSky will review the information and provide feedback as to the potential success of the facility to attain DarkSky Approved status.
- C. Application.** After review of the Pre-application materials has been performed and a response provided to the applicant by DarkSky, the applicant may choose to move forward with the DarkSky Approval process. The completed application, supporting documentation, and application fee are to be submitted to DarkSky via the online application portal. The applicant will receive email confirmation that the application materials and fee have been received. Four weeks should be allowed for review of the application. DarkSky will contact the applicant if additional information is required.

All of the following are required in order for the application to be considered complete and reviewable:

- Applicant company or business name and name of primary contact
- Mailing address and email address of business location

- Phone number
- Maps of the area to be designated as a DarkSky Approved Lodging, clearly indicating the Lodging boundaries and geographic context
- Site plan showing the location of facilities and any sensitive resources (e.g., natural areas, bodies of water)
- Checklist showing compliance with the criteria (see **Section 2**)
- Documentation of night sky quality
- Habitat Identification Report (see **Section 2.2.B**)
- Lightscape Management Plan (see **Section 2.2.C**)
- Lighting Inventory, including luminaire locations (see **Appendix A**)
- Description and documentation of interpretive programs or materials related to dark skies and/or natural darkness
- Description and documentation of proposed signage identifying the site as a DarkSky Approved Lodging (*Note: The signage is **not** permitted to be installed until the property has received official notification of its certification*)

- D. Site visit.** An integral element of the approval process is ensuring that an applicant fully complies with and meets all application requirements, including creation of an HIR (see **Section 2.2.B**) and creation and implementation of an LMP (see **Section 2.2.C**).

Although staff can complete much of the evaluation of a candidate Facility by reviewing the application and supporting documentation and discussing the proposal with the applicant by phone and email, to ensure the integrity of the program, DarkSky or its designated representative will also conduct a site visit as part of the final review process. The purpose of such a visit is to verify that the facility is fully compliant with the lighting specifications and other requirements and to meet with facility owners, staff, and others involved in managing the program. It is important to note that all costs for the site visit are the full responsibility of the applicant.

Although it is preferred that DarkSky staff or trained volunteers perform the site visit, in order to facilitate the process and minimize costs to the applicant, DarkSky may instead elect to contract with a third party to conduct the visit.

3.2 Review process

- A. Application review.** Four weeks are typically required for DarkSky staff to complete an initial review and assessment of the application. DarkSky will contact applicants if questions arise during the review process or if additional information is required.
- B. Review of site visit report.** DarkSky staff will review the field report and once satisfied with its completeness, provide a copy to the applicant. The final decision on certifying the Facility as consistent with the criteria lies solely with DarkSky.
- C. Certification.** Upon completion of the site visit, DarkSky will make a final determination on the application and will notify the facility of its decision. In the event that there are outstanding issues of non-compliance, DarkSky will work with the applicant to address and remedy those

deficiencies. Once the Facility has been granted certification as a DarkSky Approved Lodging, DarkSky will notify the applicant in writing and will add the facility to its DarkSky Approved Lodgings [webpage](#).

- D. Confidentiality.** DarkSky will maintain the confidentiality of the application and field assessment and will not make these available to other parties without the prior approval of the applicant. On the DarkSky website, only the fact that the Facility meets the program criteria will be disclosed. Should the Facility cease to be certified, DarkSky shall only disclose that the Facility was certified for a certain period of time and shall not disclose the reason(s) for decertification.

4.0 Ongoing commitments

4.1 Maintenance of required conditions

To demonstrate that the conditions and other criteria required for certification have been maintained, the following measures shall be taken and the results reported in the Facility's Annual Report (see **Section 4.2**).

- A. Sky quality:** The Facility should demonstrate a commitment to monitoring sky quality over time. This may be done by the Facility or through a partnership with a local group.
- B. Light fixture compliance:** The Facility shall review its lighting inventory at least annually for consistency with the LMP and shall update the Inventory documentation as needed.
- C. Outreach:** The Facility shall evaluate its outreach program at least annually and make changes as needed.

4.2 Annual Report

The Facility is required to submit an Annual Report on sky quality measurements, light fixture compliance, and outreach and educational activities for the year, including any changes to the lighting or sky quality measurements (see **Section 4.1**).

Failure to submit the Annual Report in a timely manner will result in the suspension of the Facility's DarkSky Approved Lodging certification. If the Facility submits the report within 90 days, the certification will be reinstated. After 90 days, it will be assumed that the Facility wishes to withdraw from the Program.

The Facility should maintain a current point of contact and notify DarkSky of any changes within 30 days.

Should the Facility change ownership, the new owner should notify DarkSky within 30 days.

Additional information on the specific requirements for the Annual Report can be found in **Appendix C**.

4.3 Recertification

To ensure that the Program meets the highest standards of professionalism and integrity and that a DarkSky Approved Lodging remains exemplary in its protection and restoration of nocturnal lightscapes, DarkSky will recertify each Facility *every five years*.

As part of the recertification process, the DarkSky Approved Lodging (hereafter, "Lodging") should update its Habitat Identification Report (HIR) and its Lightscape Management Plan (LMP) as necessary to

be consistent with the current Program criteria. It is expected that any changes to the outdoor lighting on the Lodging property will be consistent with the updated LMP.

Recertification requires the submission of the current Annual Report (refer to **Section 4.2** and **Appendix C**), confirming that the Lodging continues to meet the minimum standards and requirements set out in the Program guidelines, as well as the associated recertification fee. At DarkSky International's discretion, recertification may also include a requirement for an additional site visit.

It is expected that the recommendations for lighting will evolve over time, given new information on the effects of light and as new products become available. As a result, the DarkSky Approved guidelines may also change. As updated guidelines are issued, the Lodging will have the option of continuing under the prior guidelines for an additional five years.

DarkSky Approved Lodgings are encouraged to indicate how they plan to bring any non-compliant light fixtures into compliance with any new program requirements within 10 years. For example, an applicant certified under the 2022 guidelines would be due for recertification in 2027. If new guidelines were released in 2025, the Lodging would have the option to continue under the 2022 guidelines for an additional five years. Alternatively, they could start operating under the 2025 guidelines and be certified as such when they meet the new requirements for compliance.

4.4 Decertification

Should a DarkSky Approved Lodging fail to comply with the requirements in this document, DarkSky reserves the right to suspend its DarkSky Approved certification until such a time that issues of noncompliance have been resolved to DarkSky's satisfaction. In the event that these matters cannot be resolved in a timely manner, DarkSky shall terminate the facility's certification and remove it from the list of certified sites.

4.5 Withdrawing from the Program

An approved facility may withdraw from the program at any time for any reason, subject to a 30-day written notice. Any fees paid are nonrefundable.

4.6 Investigation and due process

Any allegation of impropriety concerning any of the elements of participation in the Program outlined in this document will be subject to DarkSky investigation and potential remedial action, including temporary suspension or permanent revocation of the designation. DarkSky International staff shall perform due diligence in gathering facts concerning such allegations they deem credible and will prepare a report of their findings for consideration by the Executive Director. The Executive Director commits to weighing the evidence fairly and impartially, and to seeking to resolve disputes whenever possible through dialog.

A Lodging subject to an investigation shall be notified in a timely manner and solicited for evidence contrary to the specifics of the allegation at hand. Any Lodging so investigated has the right to review the allegations against it and all factual information collected by DarkSky pertinent to the allegations.

The Lodging will be given an opportunity to correct any deficiencies established by the DarkSky investigation within a reasonable period to be prescribed by the Executive Director.

Failure to achieve consensus through these means risks suspension or revocation of the designation. a recommendation of such will be forwarded to the Board of Directors for formal ratification before

coming into force. The Board's decision on any disciplinary matters involving an approved facility shall be considered definitive and binding.

A Lodging's certification may be suspended for up to 12 months, during which time the Lodging has a chance to remedy any deficiencies. After 12 months, the suspension becomes a permanent decertification.

Appendix A— Lightscape Management Plan and Lighting Inventory

A.1 Lightscape Management Plan (LMP)

DarkSky strongly recommends that a candidate Facility retain the services of a qualified lighting professional with experience in designing for dark sky locations. It is further recommended that the Facility follow the guidance in documents such as *ANSI/IES RP-43-22, Recommended Practice: Lighting for Exterior Applications* and similar national standards documents.

The Facility's LMP should employ good lighting practices, such as:

- Adopting the [Five Principles for Responsible Outdoor Lighting](#) as a central element of the LMP
- Establishing written policies and procedures that meet or exceed local agency, building code, or department policies for outdoor lighting and that conform to all applicable local, regional, and national laws and ordinances
- Using light only when it is needed, where it is needed, and in the appropriate amount for the identified task
- Using outdoor light fixtures (luminaires) that direct their light downward, and make appropriate use of timers and/or occupancy sensors
- Employing the recommendations of the [DarkSky Values-Centered Outdoor Lighting Policy](#)
- Considering the impact that indoor lighting has on the outdoor environment and identifying steps to minimize it.

Exceptions may be granted on a case-by-case basis in situations where the safety of Facility staff and visitors requires a specific amount of light and accurate color rendition, where no other suitable fixtures are available, and/or for historic preservation. In these cases, it is important that additional steps be taken to reduce the lighting impact by turning off lights when not needed.

DarkSky may request additional descriptions, photographs, or drawings of such designated special-use light fixtures. DarkSky will review these special uses to ensure that the Facility's lighting acts as a suitable example of good lighting for the public and that it protects the nighttime environment to the maximum extent practicable.

A.2 Lighting Inventory

The Lighting Inventory should specify all of the following for each light fixture (luminaire):

- Location
- Purpose
- Manufacturer
- Model number
- Light source type (e.g., incandescent, LED)
- Correlated color temperature (CCT), in kelvins (K)
- Luminaires total lumen output
- Operational details, such as use of motion sensors, time switches (a.k.a. timeclocks), or

photocells

- Shielding and aiming, including IES BUG rating if available
- Daytime photographs, or manufacturer diagrams or cut sheets of each fixture (luminaire) type
- Sample nighttime photographs taken from defined locations as indicated on the site plan

Note: When there are numerous outdoor light fixtures, it is acceptable to list them in groups according to purpose or area.

Appendix B – Campgrounds, temporary structures, and properties promoting ecotourism

DarkSky recognizes that it is not always feasible to hire a professional lighting designer and that people are left with no guidance on how to choose responsible lighting. For these reasons, the following recommendations are offered, which may be suitable for *seasonal campgrounds, temporary structures, and properties promoting ecotourism that are located in dark sky locations*. These guidelines are *not* appropriate for hotels and resort style facilities. In those instances, the Facility should retain the services of a qualified lighting professional.

Ideally, light fixtures (luminaires) should be certified as [DarkSky Approved](#) or otherwise meet the relevant criteria. In most cases, by selecting light fixtures that are consistent with the recommendations in **Table B-1**, a Facility will be in compliance with the Program criteria.

Exception: Luminaires mounted lower than 0.5 meter (1.6 feet) above grade and having fewer than 40 lumens total output may be allowable with only partial shielding and CCT above 2700K (but in no case above 3000 K). Alternative design solutions providing the same desired effect will be considered on a case by case basis.

In all cases, the Facility should take care to conform to all relevant local codes and ordinances pertaining to the use of light at night.

Table B-1. Luminaire recommendations for campgrounds, temporary structures, and properties promoting ecotourism

Setting	Luminaire shielding requirement	Minimum lighting requirements	Ideal lighting characteristics
Exterior – common areas	Fully shielded	Luminaires emitting ≤ 500 lumens; CCT ≤ 2700 K. On/off switch.	Luminaires emitting ≤ 300 lumens; CCT ≤ 2200 K. Motion sensor.
Exterior – guest units' entries and porches	Fully shielded	Luminaires emitting ≤ 500 lumens; CCT ≤ 2700 K. On/off switch.	Luminaires emitting ≤ 300 lumens; amber color (CCT ≤ 1800 K). Motion sensor with an on/off switch.
Exterior – maintenance yard	Fully shielded	Luminaires emitting ≤ 800 lumens; CCT ≤ 2700 K. Turned off when not in use.	Luminaires emitting ≤ 400 lumens; CCT ≤ 2200 K. Motion sensor.
Exterior – pathways	Fully shielded	Low pathway lights. Emitting ≤ 100 lumens; CCT ≤ 2700 K. Photocell controlled.	Luminous or reflective markers, or low pathway lights. Luminaires emitting ≤ 50 lumens; CCT ≤ 2200 K.

Setting	Luminaire shielding requirement	Minimum lighting requirements	Ideal lighting characteristics
Exterior – parking	Fully shielded	Tire stops and curbs painted white or yellow. Luminaires emitting ≤ 800 lumens; CCT ≤ 2700 K. Motion sensor, curfew dimming, or photocell for on; switch off.	Luminous or light-colored products.
Exterior – festoon and rope	Shielded to the extent possible	1-watt bulbs; CCT ≤ 2700 K). Not less than 305 mm (12 in.) on-center. Switched off when not in use.	1-watt bulbs; CCT ≤ 2700 K. Dimmed down to 25% when in use. Switched off when not in use.
Signage providing directional information	Partially shielded	Top-mounted lighting: luminaires emitting ≤ 100 lumens; CCT ≤ 2700 K.	Glow-in-dark or retro-reflective lettering <i>Or:</i> Top-mounted, solar-powered luminaires emitting < 50 lumens; CCT < 2200 K.
Service vehicles			Amber lights. These are available in addition to legal white lights and are driver selectable.

Appendix C – Annual Report

A facility approved as a DarkSky Approved Lodging (hereafter, “Lodging”) is required to provide an Annual Report to DarkSky International. Failure to provide this information in a timely manner may result in temporary suspension or even possible revocation of the facility’s designation.

At a minimum, the Annual Report must provide:

- A report on annual sky quality measurements:
 - The Lodging shall remeasure the darkness of its dark sky on an annual basis to confirm that the reading is still 21.2 mpsas or greater.
 - Should the readings fall below 21.2 for a period of two years, the Lodging shall identify the steps it will take to reduce light pollution from its own operation and neighboring sources.
 - If the total luminaire lumens for all onsite outdoor lighting have increased by 10%, the Lodging shall remeasure the darkness of its dark sky to confirm that the reading is still 21.2 mpsas or greater.
- A summary of programs, interpretive events, communications, or other educational outreach activities administered at the Lodging.
- A summary of changes in the Lodging’s outdoor lighting system (LMP) since the original certification or the last Annual Report, whichever is more recent:
 - This includes the addition or removal of light fixtures, changes in light output or CCT of the light fixtures, and any other modifications to the outdoor lighting on the property.
 - For all new light fixtures installed, a description (manufacturer, model number, lumen output, BUG rating, and CCT) and accompanying photographs must be provided.
- Attestation that the Lodging is compliant with the current program guidelines