

Dark-Sky Friendly Outdoor Lighting on Nantucket

Dear Homeowner, Manager, or Business Owner,

Not all outdoor lighting is the same. Good lighting is lighting that adheres to the “**Five Principles of Responsible Outdoor Lighting**” (attached). Bad lighting causes glare, wastes energy, is linked to health problems ranging from sleep disruption to cancer, is responsible for millions of bird and mammal death each year, and ruins our ability to see the stars and the Milky Way at night.

I would really appreciate it if you checked all of your exterior lighting for compliance with the “Five Principles”:

- Do all your exterior lights have a **clear purpose**? Are there alternatives (such as reflective tape or self-luminous signs) that would be less harmful to the environment and wildlife?
- All your exterior lights **directed only to where light is needed**? Could shields be added to keep the light spilling beyond where it is needed? Could any floodlights you have be aimed so that they only shine done and not beyond your property line?
- Are they **only as bright as they need to be**? Have you tried a lower light level to see if that would be adequate for your lighting needs?
- Are your lights on **only when they are useful**? Could you add a timer or motion detector so that the light is turned off when not needed?
- Are you using lights that are a **"warm" color** that limits the amount of shorter wavelength light (blue-violet light) to the least amount needed? The International Dark Sky Association now recommends 2200K for most outdoor lighting installations.

In addition, please ensure that you are in compliance with **Nantucket's Outdoor Lighting Bylaw** (Chapter 102 of the Nantucket Code). This can be found online at <https://ecode360.com/11470851>.

Answers to frequently asked questions are attached.

Thank you for your attention to this!

A Dark-Sky Lover

LIGHT TO PROTECT THE NIGHT

Five Principles for Responsible Outdoor Lighting



USEFUL



ALL LIGHT SHOULD HAVE A CLEAR PURPOSE

Before installing or replacing a light, determine if light is needed. Consider how the use of light will impact the area, including wildlife and the environment. Consider using reflective paints or self-luminous markers for signs, curbs, and steps to reduce the need for permanently installed outdoor lighting.

TARGETED



LIGHT SHOULD BE DIRECTED ONLY TO WHERE NEEDED

Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.

LOW LIGHT LEVELS



LIGHT SHOULD BE NO BRIGHTER THAN NECESSARY

Use the lowest light level required. Be mindful of surface conditions as some surfaces may reflect more light into the night sky than intended.

CONTROLLED



LIGHT SHOULD BE USED ONLY WHEN IT IS USEFUL

Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.

COLOR



USE WARMER COLOR LIGHTS WHERE POSSIBLE

Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.



Outdoor Lighting FAQ

Can I still keep my outdoor lighting and still be dark-sky friendly?

Of course! But please adhere to the “Five Principles of Responsible Outdoor Lighting” promoted by the International Dark Sky Association. There are many dark-sky friendly options.

What’s the big deal about glare?

Glare (unwanted light shining sideways) makes it harder to see the things you want to see. Glare is especially dangerous when it blinds drivers, bicyclists, and pedestrians. The elderly are especially sensitive to glare.

What’s especially bad about blue-rich white light?

Blue light disrupts sleep, ruins night vision and causes more glare in the human eye, making it harder to see what you want to see. Blue light also scatters more in the atmosphere. LED lights with a color temperature of 5000K (“cool white”) make seven times more light pollution than LEDs with a color temperature of 3000K (“warm white”). The International Dark Sky Association now recommends 2200K for most outdoor lighting installations.

Doesn’t more lighting protect my property from criminals?

No. Scientific studies have found no confirmed link between outdoor lighting and reduced crime. In fact, bad lighting causes glare, which leads to high contrast and deep shadows that can hide intruders. Burglars use your lights to see where they’re going, too. Daytime and nighttime crime rates are the same regardless of lighting. Safety is enhanced by *better* lighting, not *more* lighting.

Is outdoor lighting on Nantucket regulated by law?

Yes. See Chapter 102 of the Nantucket Code (<https://ecode360.com/11470851>). This bylaw was adopted at a Town Meeting in 2005 to eliminate glare that can annoy neighbors and create safety problems, minimize light trespass, reduce the energy and financial costs of outdoor lighting, preserve the rural nature of the island, enhance nighttime enjoyment of property and protect property values, and enhance the enjoyment of the night sky.

How much will it cost to fix?

Since bad lighting is wasted energy, most fixes that reduce glare and uplighting will save you money. There may be upfront costs for new bulbs or fixtures, but they will usually pay for themselves within a few years.

Where can I find good outdoor light fixtures?

Whether you’re shopping online or in a store, look for the *Fixture Seal of Approval* by the International Dark Sky Association.

Where can I find out more info?

International Dark Sky Association: <http://www.darksky.org>

International Dark Sky Association – MA Chapter: <https://idamass.wordpress.com/>

Nantucket Lights: <https://nantucketlights.org/>