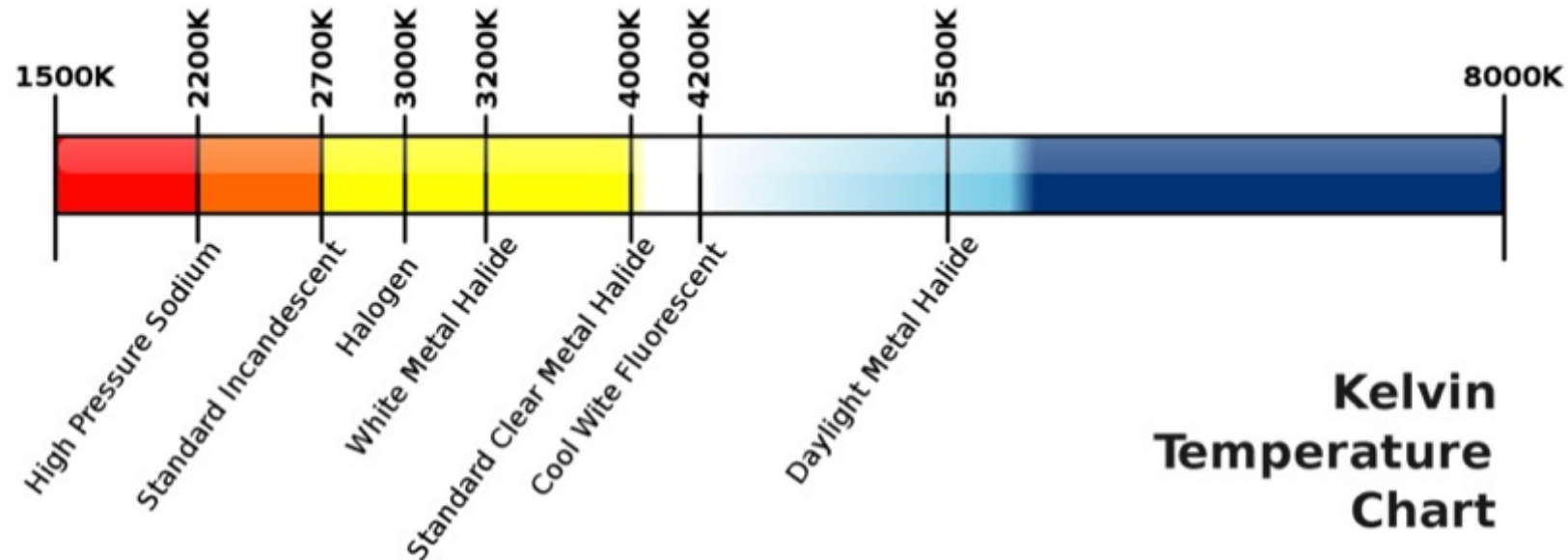
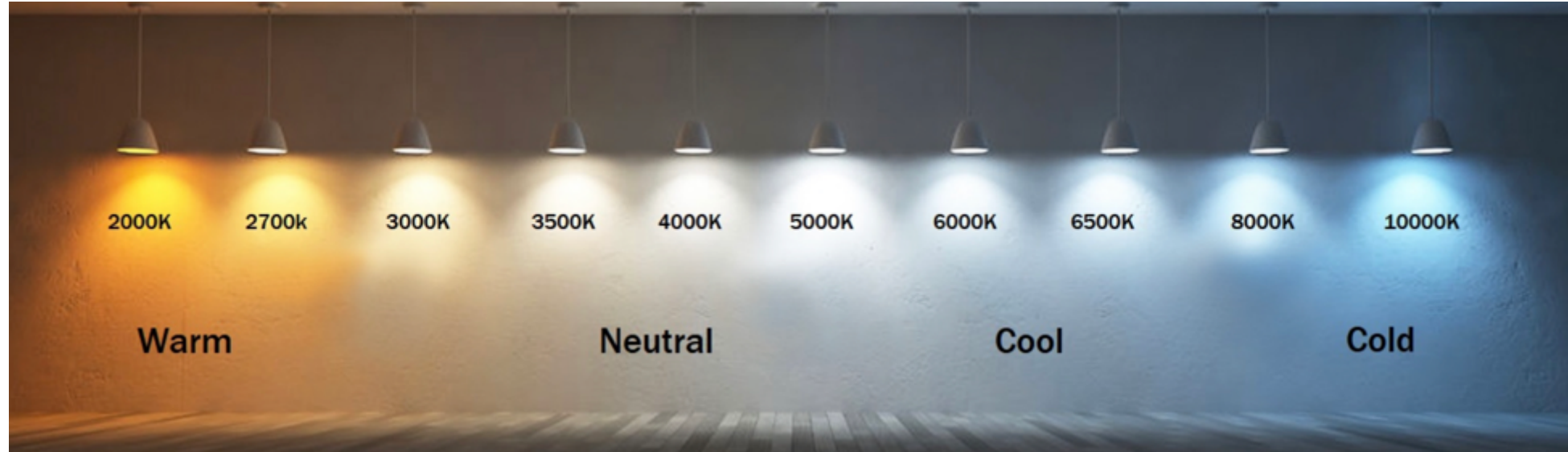


# Proposed Amendment to the 2003 Nuisance Ordinance:

All proposed changes are related to Outdoor Lighting:

- 6 definitions are added to update with current lighting terminology (also coincides with language used in newer ordinances)
- clarifies attributes of nuisance outdoor lighting
- simplifies the description of outdoor lighting that is considered a nuisance

**D. Correlated Color Temperature (CCT)** – A unit of measure for light color, measured in degrees, based on the Kelvin temperature scale (K). Color temperatures over 3500K are called “cool”, or “daylight” colors, while lower color temperatures (2700 – 3000K) are considered “warm” colors.

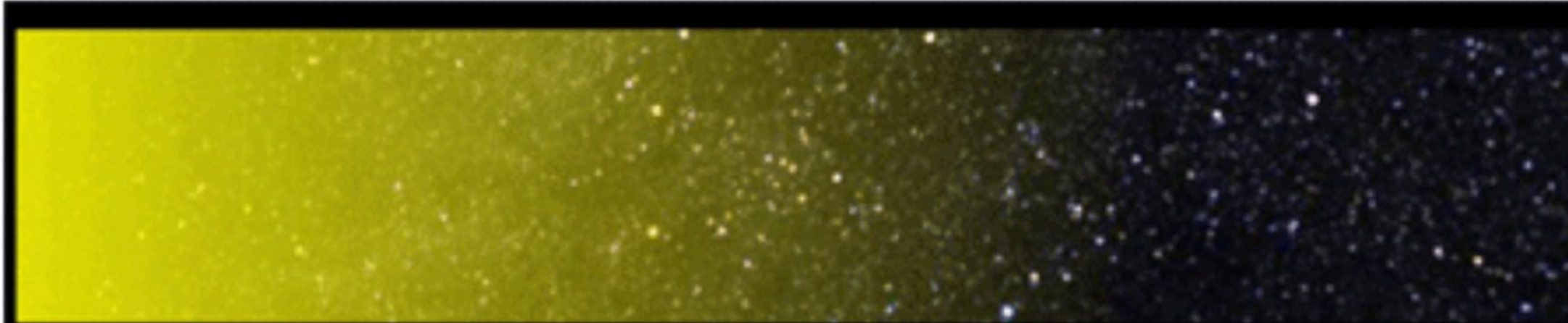
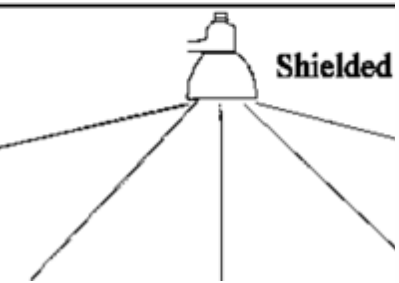
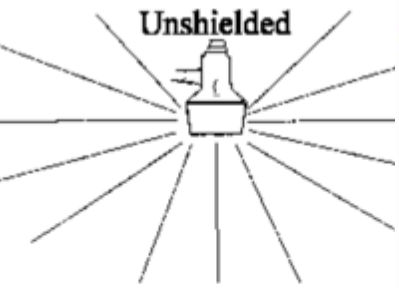


# The Color of Light Matters

- Exposure to Blue light at night can be harmful to human health and endanger wildlife (disorients some bird, insect, turtle & fish species).
- Blue light scatters more in the human eye than longer wavelength light. This causes more glare and problems with visual acuity and may impact driving or walking at night. Sufficient levels of blue light can damage the retina. It has a greater impact on circadian rhythms and sleep quality than other light.
- LED and metal halide fixtures contain large amounts of blue light in their spectrum. (important to look at CCT when purchasing)
- The American Medical Association encourages the use of 3,000K or lower for outdoor lighting. AMA also recommends all outdoor LED lighting should be shielded to minimize glare and other detrimental effects to humans and the environment.
- Blue light brightens the night sky more than any other color of light.

**E.** Fully Shielded – An outdoor fixture constructed and mounted so that the installed fixture emits no light above the horizontal plane passing below the fixture.

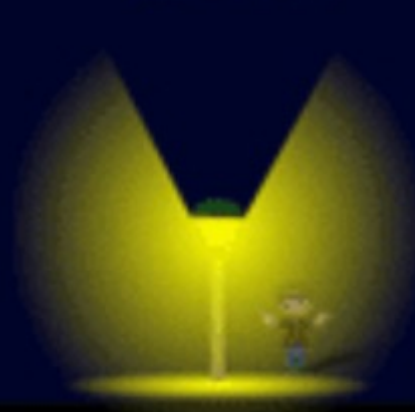
**Deleted:** ~~Shielding~~ - a permanently installed shade, cowl or baffle for the purpose of directing light from a lamp.



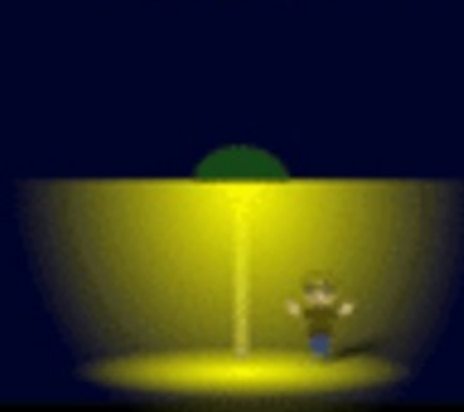
very bad



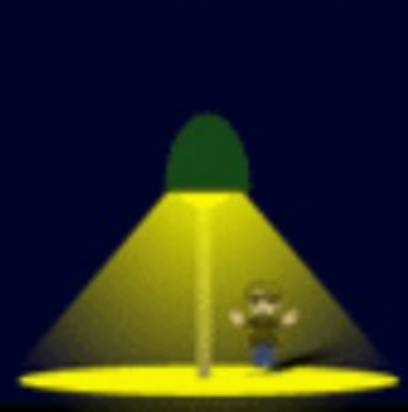
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better



best



- G. Glare – Light entering the eye directly from luminaries or indirectly from reflective surfaces. This may cause visual discomfort, disability, loss in visual performance or visibility.







J. Light Trespass – Any light, falling beyond the legal boundaries of the property it is intended to illuminate, causing annoyance, loss of privacy, or other nuisance.



**K.** Lumen – A unit of measure used to qualify the amount of light produced by a lamp or emitted from a fixture (as distinct from “watt”, a measure of power consumption).

### Compare Brightness

EFFICIENCY	LEAST			MOST
BULB TYPE	 STANDARD	 HALOGEN	 CFL	 LED
450 LUMENS	40W	29W	9W	6W
800 LUMENS	60W	42W	14W	9W
1100 LUMENS	75W	53W	18W	11W
1600 LUMENS	100W	72W	23W	14W
RATED LIFE	1 YEAR	1-3 YEARS	6-10 YEARS	12-25 YEARS
SAVINGS	×	UP TO 30%	UP TO 75%	UP TO 90%

P. Skyglow – Brightening of the nighttime sky caused by artificial light directed or reflected upwards or sideways.





## SECTION 2 - INTENT AND PURPOSE

The purpose of this ordinance is to promote the general health, safety, welfare and peace of the residents and property owners of Leelanau Township by protecting land values, aesthetic values and the rural character of Leelanau Township by regulating the following:

- A. Storage and disposal of junk, garbage, rubbish and building materials;
- B. Storage, parking and unreasonable accumulation of junk vehicles, partially dismantled vehicles and abandoned vehicles;
- C. Unreasonable or unnecessarily loud noise disturbances;
- D. Outdoor lighting fixtures that contribute to light pollution of the night sky, including glare, light trespass, and skyglow
- E. Structures that have become unsafe and/or uninhabitable due to damage by fire, wind, water or physical deterioration.

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**SECTION 3 - GENERAL NUISANCES**

**THE FOLLOWING ARE HEREBY DECLARED NUISANCES BY THE LEELANAU TOWNSHIP BOARD:**

**D. OUTDOOR LIGHTING** — Any outdoor lighting fixture that is NOT fully shielded is considered a nuisance when:  
1. The initial lamp lumens are over 600 lumens.  
2. The Color Correlated Temperature (CCT) of the lamp is above 3000K.

Exceptions:

- a. Outdoor lights utilized for the proper illumination of an official flag. The US flag should have a light source sufficient enough to distinguish the colors of the flag so it is recognizable by the casual observer. (Downward directed solar lights are available for flag poles).
- b. Security lighting equipped with infrared or motion sensors.

**E. BLIGHTED STRUCTURES** — **Any blighted structure, unless the same is:**  
1. Kept securely locked, and  
2. Windows kept glazed or neatly boarded up, and  
3. Otherwise protected to prevent entrance thereto by unauthorized persons.

Exceptions:

- a. Those structures in the process of rehabilitation or reconstruction in accordance with a valid building permit issued by the Leelanau County Building Inspections Department.
- b. Any structure designated or deemed, by the Leelanau Township Board or other approved authority, as contributing to the Township’s rural character and/or having historical value.

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Deleted: Outdoor lighting fixtures that are NOT designed to be directed generally downward, with shielding if necessary, in such a way as to limit all lighting above the fixture from horizontal and upward, with the following exceptions:

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Deleted: <#>Single decorative lamps of less than 40 watt

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Deleted: The following are exceptions to this sub-paragraph