

October 16, 2020

Lighting Guidelines

Lyons Ridge, Montane, and the other communities positioned between the hogback and foothills are intended to be dark-sky communities according to Jefferson County. A dark-sky community is a community that is dedicated to the preservation of the night sky through the implementation and enforcement of a quality outdoor lighting ordinance. These efforts reduce light pollution - the excessive, misdirected or invasive use of artificial outdoor lighting. Light pollution affects the feeding, sleeping, mating, and migration cycles of wildlife which we share our community with.

The Lyons Ridge Metro District has updated lighting protocol to comply with dark-sky community standards. Effective January 1, 2021 pathway, landscape, patio site structures and exterior façade lighting should comply with the intended low light level quality of the community. The following protocol will be enforced:

Requirements

» Site lighting will be low level and accent only. Light source shall be LED and full cutoff.

» Up-lights and/or wash lights are not permitted.

» All lights shall have shields or hoods to prevent visibility of the light source to the street or neighboring homes.

» Holiday lighting will be permitted between October 1st and January 31st.

We are aware that some of you have implemented landscape lighting previously approved by the DRC. Additionally, none of the KB homes meet the existing lighting guidelines from 2015. The affected residents are requested to follow the guidelines below to be grandfathered-in:

Guidelines for grandfathering-in existing lighting

» Previously approved up-lights (including American flags, trees, boulders, ponds, address #, and other landscape fixtures) shall not exceed 900 Lumens in brightness, 3000 Kelvin of color temperature, and all light shall be cast within the lot property lines.

» Exterior façade, patio, and pathway lighting shall have shields/hoods added or be dimmed to prevent negative spillage of the light source to the street or neighboring homes.

» If unable to retrofit existing lighting we ask you turn off outdoor lights, including porch lights by 11PM.

Homeowners whose property does not meet the protocol set forth will be sent a courtesy notice. Failure to conform by January 1, 2021 will result in a Notice of Non-Compliance and applicable fines.

Thank you for helping our neighborhood become a dark-sky community!

- Lyons Ridge Metropolitan District

8351 E. Belleview Ave * Denver CO 80237 Phone: 303-773-1700 / fax: 303-740-6954 <u>http://www.lyonsridgemetro.org</u> Email: <u>Irdrc@lyonsridgemetro.org</u>

IYONS RIDGE

Requirements specify lights should be no brighter than 900 lumens. See chart & average lumens to watts conversion for LED, CFL, Halogen and Incandescent light bulbs for further information:

- LED light bulb efficacy ≈ 75 lumens per watt (*Im/W*);
- CFL light bulb efficacy ≈ 65 lumens per watt (*Im/W*);
- Halogen light bulb efficacy ≈ 20 lumens per watt (Im/W);
- Incandescent light bulb efficacy ≈ 15 lumens per watt (Im/W).

BRIGHTNESS BULB	450 Iumens	800 Iumens	1100 Iumens	1600 Iumens	2600 Iumens	5800 Iumens
	6W	9-10W	13W	16-18W	24W special high	45W voltage lamps
CFL	8-9W	13-14W		23W	40W	85W
Regular	40W	60W	75W	100W	150W	300W
Halogen	29W	43W	53W	72W	150W	300W

Source: https://robertselectric.com/how-many-led-lumens-youll-need-to-light-your-space/

The Kelvin scale to determine compliance for 3,000K or lower for light warmth is below:



Source: https://www.mydimmerswitch.com/how-tos/kelvin-temperature-led/

"Full cut off" simply means every portion of a light source meets a target or end – no light spills on indefinitely, as illustrated:



https://cityofmhk.com/DocumentCenter/View/49650/UCR-User-Guide-2-12-18?bidId=

8351 E. Belleview Ave * Denver CO 80237 Phone: 303-773-1700 / fax: 303-740-6954 <u>http://www.lyonsridgemetro.org</u> Email: <u>lrdrc@lyonsridgemetro.org</u>