Dork Sky Nov, 20, L, 2023

Considerations for light limits extending beyond our property lines.

With higher density, more building coming to or island and inventions of new lighting technology coming to market there is a need to regulate light pollution radiating to our neighbours and friends. The new term is light trespassing, when our lighting interrupts the quality of life of those who live near us.

This is similar to driving against others who forget to lower their high beams when we are driving. Have you been walking in the dark trail, when a friend shines a light in our eyes how that blinds us for a minute or two, this same thing is happening to us when we look directly at a bulb shining from our neighbours. New evidence shows how the intensity and the colour of the light will effect our ability to sleep. A natural way to sleep is to follow the light cycles of the day, the sun comes up the eyes see a change of luminosity and we wake up refreshed. Lighting miss used during the dark hours has a direct affect on our health, our psyche and a large effect on the quality of life. With the added blessing of saving money and electricity and the night view of or shy, to be nicnamed Dark Sky

There is little need to shine our lights up in the trees. A simple fix is to direct the light with shields directed towards the ground or towards our work, so out neighbours can still have the peace from a dark sky.

If light is deemed useful and necessary, follow these guidelines to prevent, or when that's not possible, minimize light pollution.

Responsible outdoor lighting is:

#### 1. Useful

#### All light should have a clear purpose

Before installing or replacing a light, determine whether 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.

# 2. Targeted

#### Light should be directed only to where it's 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.

#### 3. Low level

#### Illumination should be no higher 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 was intended.

# 4. 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.

# 5. Warm-coloured Use warmer-colour lights where possible Limit the amount of shorter wavelength (blue-violet) light to the least amount needed. Light where you

Note to Table 4.3

- For purposes of this section, residential refers to all residential land-use zoning, including all densities and types of housing such as single-family detached and duplexes, but does not include multi-family residential uses.
- 4.4. Spot Light Aiming Standard. Light Fixtures containing Spot or Flood lamps must be aimed no higher than 45 degrees above straight down (half-way between straight down and straight to the side) (Figure 4.4). When aimed above straight down but at less than 45 degrees, such light fixtures shall be considered partially shielded; when aimed straight down they shall be considered fully shielded.



Figure 4.4. Spot light aiming

### need it, when you need it, in the amount needed, and no more.

Thank you for your time, and all that you do. It has been a joy to share this idea with you. Enjoy a lovely evening and season to come.

Please find attached a copy of the bylaw currently in use in Flagstaff Arizona.

Sincerely, Gabriolan, John Hall