

December 20, 2021

BY EMAIL

Nina Hickson, City Attorney
Atlanta, Georgia
lawdepartment@atlantaga.gov

Re: LED Radiation Devices

Dear Nina Hickson,

The natural night is a fundamental resource that is critical to the proper functioning of humans and nearly all biological systems. Artificial light is a pollutant that damages the natural night resource and greatly increases sickness, risk of cancer, mood disorders and premature births.¹

The claim that Light Emitting Diodes are energy efficient is fraudulent. According to the US Department of Energy's website, energy efficiency means "using less energy to get the same job done."² The job, in the case of streetlighting, is to provide uniform illumination with minimal harm. LEDs do not produce uniform illumination³, but rather they emit radiation from a flat surface which creates a mix of energies that are not uniform. Since LEDs do not do the same job as an incandescent or High-Pressure Sodium, the claim that LEDs are energy efficient cannot be made.

LED radiation is discriminatory because it interferes with human nerves and disrupts major life functions such as seeing, thinking, and concentrating for people with disabilities, such as those with epilepsy, autism, PTSD, migraines, bipolar disorder, and others. LED radiation prevents safe access to public services such as roads, sidewalks, and government facilities because it triggers epileptic seizures, migraines, psychological trauma, and thoughts of suicide.⁴

LED radiation is toxic and dangerous because it can have an exceedingly high peak radiance and because the emitted radiance is not uniform. As an example of how dangerous LED radiation is, consider this warning shown in Figure 1 from the company Gear Light.

¹ <https://www.softlights.org/resources>

² https://www.energystar.gov/about/about_energy_efficiency

³ <https://ieeexplore.ieee.org/document/8879542>

⁴ <https://www.softlights.org/stories>

WARNING: To avoid eye injury, do not stare directly into the light beam or shine the beam directly into anyone's eyes. This product is not designed, intended, or recommended for children or hazardous environments.



Figure 1 - LED Flashlight

The regulatory meaning of light and illumination only applies to emitters that produce spatially uniform visible radiation. Figure 2 is a diagram showing the categorization of radiation.

Regulatory Meaning of Light and Illumination

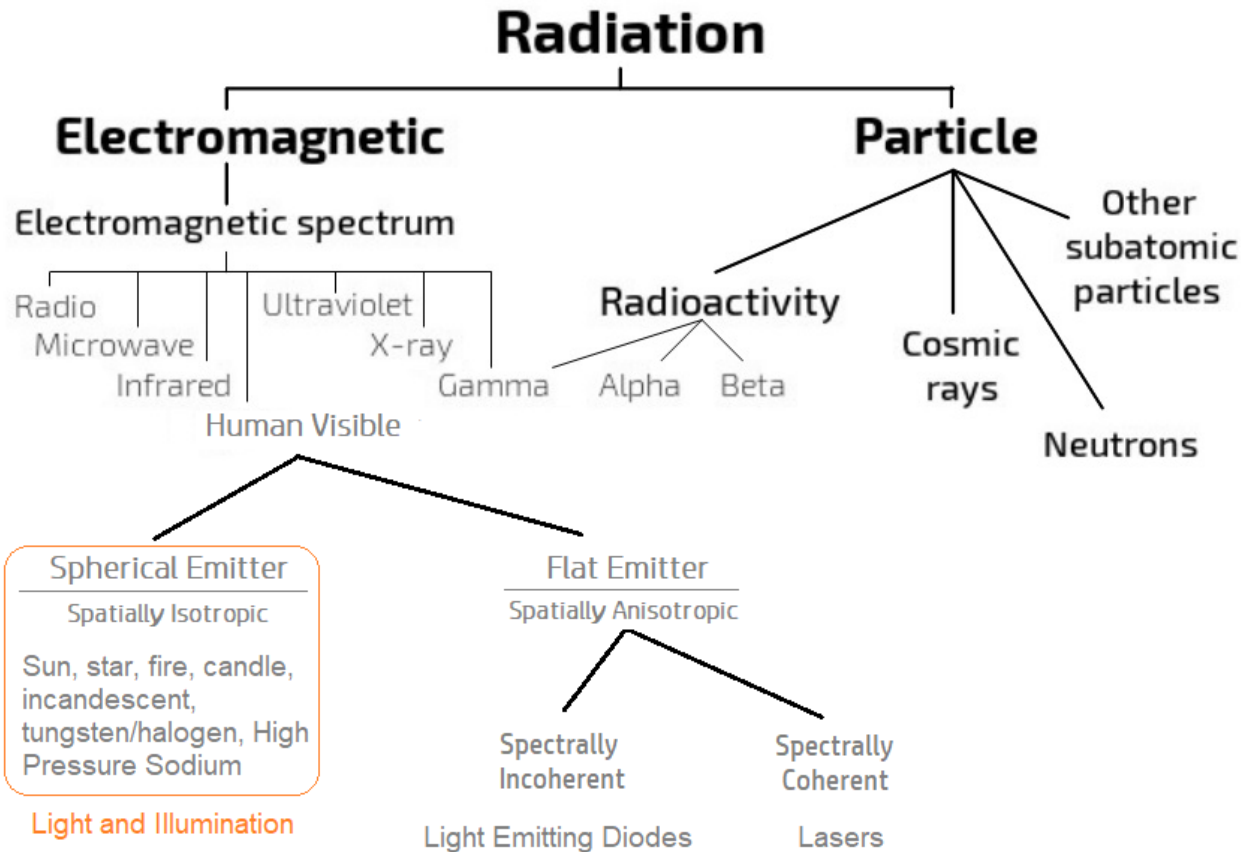
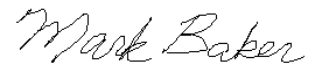


Figure 2 - Radiation Categories

A standard such as the Illuminating Engineering Society Recommended Practice for Design and Maintenance for Roadway Parking Facility Lighting (IES RP-8-18) is applicable only to the standard regulatory meaning of light and illumination and cannot be used for LED radiation devices.

LED radiation devices must not be used for the task of illumination because LED devices are not safe, they are discriminatory, and they are not energy efficient. The LED fraud is detailed on our website at www.softlights.org/led-fraud. The promotion by the city of the falsehood that LEDs streetlights are energy efficient makes the city liable for fraudulent claims. Failure by the city to ensure that the streetlights it authorizes are safe and non-discriminatory make the city liable for injuries caused by LED radiation and discrimination lawsuits.

Sincerely,

A handwritten signature in black ink that reads "Mark Baker". The signature is written in a cursive style with a large initial "M".

Mark Baker
President
Soft Lights Foundation
www.softlights.org
mbaker@softlights.org