



9450 SW Gemini Drive PMB 44671 Beaverton, OR 97008 www.softlights.org

January 27, 2022

BY EMAIL

Michael Lyles, City Attorney Annapolis, Maryland dmlyles@annapolis.gov

Re: The LED Fraud

Dear Michael Lyles,

Utility companies have made the fraudulent claim that LEDs are energy efficient. By committing this fraud, the utility companies have convinced cities across America to switch to LED streetlights with the promise of saving energy. LEDs do not save energy; instead, they emit a toxic, hazardous, discriminatory substance that is making Americans agitated and angry, increasing violence, causing epileptic seizures, migraines, panic attacks and eye damage.

- The standard for streetlights is IES RP-8-18 and applies to devices that emit light uniformly, such as High-Pressure Sodium. IES RP-8-18 is not applicable to LEDs and lasers because these devices emit an intense beam of light in one direction. An energy efficiency comparison between an HPS and an LED cannot be made because HPS emits uniform light, while LEDs emit intense light beams. The two substances are different, and therefore the claim that LEDs are energy efficient cannot be made.
- 2) The city of Annapolis claims that LEDs are more down focused, and whiter¹ as shown in Figure 1. We somewhat agree with these claims, but what Annapolis doesn't state is that the spatial shape of this focused light is toxic for humans. In addition, the so-called "whiter" light just signifies more glare and more high energy blue wavelength light, increasing risk of eye damage, emotional trauma, and light pollution.

"Residents may notice that the streetlights in their neighborhood look a little different," said David Jarrell, director of the Department of Public Works for the City of Annapolis. "The light is a little whiter and more down focused than the current lights. Most people probably won't notice a change, but the new lights will result in savings due to reduced energy consumption and maintenance/replacement."

Figure 1 - Fraudulent Claim

¹ https://www.annapolis.gov/CivicAlerts.aspx?AID=734

3) Annapolis goes on to claim that the new lights "will result in savings". This statement is fraudulent. The very fact that LEDs are intense focused beams of light makes them entirely different than the uniform light of High-Pressure Sodium. This focused beam does not have uniform energy such as from HPS, so it is not just a reduced version of HPS. LED light beams have an extreme variance in energy levels between the peak in the center of the chip and the edges. There can be no "savings" because an HPS product and an LED product are entirely different substances. If Annapolis is making this claim on their own, then Annapolis is liable for the economic, environmental, and human damage caused by LEDs. However, if this claim is based on the information provided by the utility company, then Annapolis can hold the utility company liable.

We are including our report titled, <u>The LED Fraud</u> which contains more details and references to source material. Additionally, we are providing reports of how LED light beams are causing injury to people. To protect itself from liability claims, Annapolis must clearly notify the public that LEDs are toxic, hazardous, and discriminatory, and do not save energy.

Sincerely,

Mark Baker President

Soft Lights Foundation

Mark Baker

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