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PMB 44671  
Beaverton, OR 97008

January 6, 2022

**BY EMAIL**

Vivek Sankaran, CEO  
Albertsons Companies  
Vivek.Sankaran@albertsons.com

**Re: LED Discrimination**

Dear Vivek Sankaran,

We observe that Safeway has previously been the defendant in litigation involving the Americans with Disabilities Act.<sup>1</sup> We wish to alert Safeway of another situation where Safeway is violating the ADA by preventing people with light sensitivity disabilities from accessing Safeway stores. We hope that this letter will convince Safeway to take immediate action to remove the barriers to access without the need to litigate.

In 2016, the American Medical Association published ground-breaking recommendations regarding LED radiation with a document titled Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting.<sup>2</sup> This document stunned the world as it alerted the public to the toxicity of LED radiation, and the AMA recommended setting limits on this radiation. The LED cartel fought the AMA's recommendations and continues to do so. Since 2016, neither the government nor the LED cartel have taken appropriate steps to address the dangers of LED radiation.

The Soft Lights Foundation has concluded that the entire switch to LED is based on fraud. The idea that has been sold to the public is that LEDs are energy efficient or save energy compared to incandescent, fluorescent, or High-Pressure Sodium and that LED radiation is safe. These are fraudulent claims.

According to the US Department of Energy's website, energy efficiency means "using less energy to get the same job done."<sup>3</sup> The job is to provide uniform illumination with minimal harm. LEDs do not produce uniform illumination<sup>4</sup>, 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

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<sup>1</sup> <https://www.ada.gov/safeway.htm>

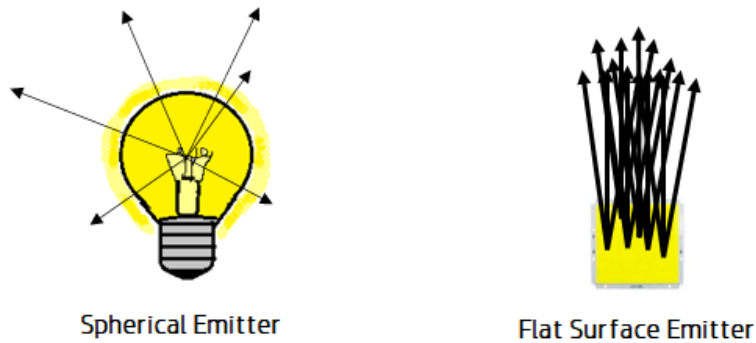
<sup>2</sup> <https://www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/about-ama/councils/Council%20Reports/council-on-science-public-health/a16-csaph2.pdf>

<sup>3</sup> [https://www.energystar.gov/about/about\\_energy\\_efficiency](https://www.energystar.gov/about/about_energy_efficiency)

<sup>4</sup> <https://ieeexplore.ieee.org/document/8879542>

Sodium, **the claim that LEDs are energy efficient cannot be made.** LEDs are simply a low quality, toxic, hazardous, and discriminatory type of visible radiation.

As shown in Figure 1, a spherical emitter sends light in all directions in space. Because of the curvature of the emitter, the light rays do not overlap, and the radiation is spatially, spectrally, and temporally uniform. On the other hand, a flat surface emitter, such as an LED, sends light only in the forward direction. The light rays are confined to an 'escape angle' which is determined by the physical characteristics of the chip. There are thus overlapping rays, with the most overlap being in the center of the chip, and the least overlap being on the edges. The result is that every point in space has different spatial, spectral, and temporal properties. This non-uniform radiation profile is not suitable for illumination and not compatible with the human nervous system. **An energy efficiency comparison between an incandescent or High-Pressure Sodium and an LED cannot be made.**



*Figure 1 - Spherical vs. Flat Surface Emitter*

Figure 2 shows the uniform spatial energy from candles, incandescent and High-Pressure Sodium versus the non-uniform spatial energy from an LED. The intense peak of energy will cause eye damage and will overload the nerve signals to the brain because the information is not uniform.

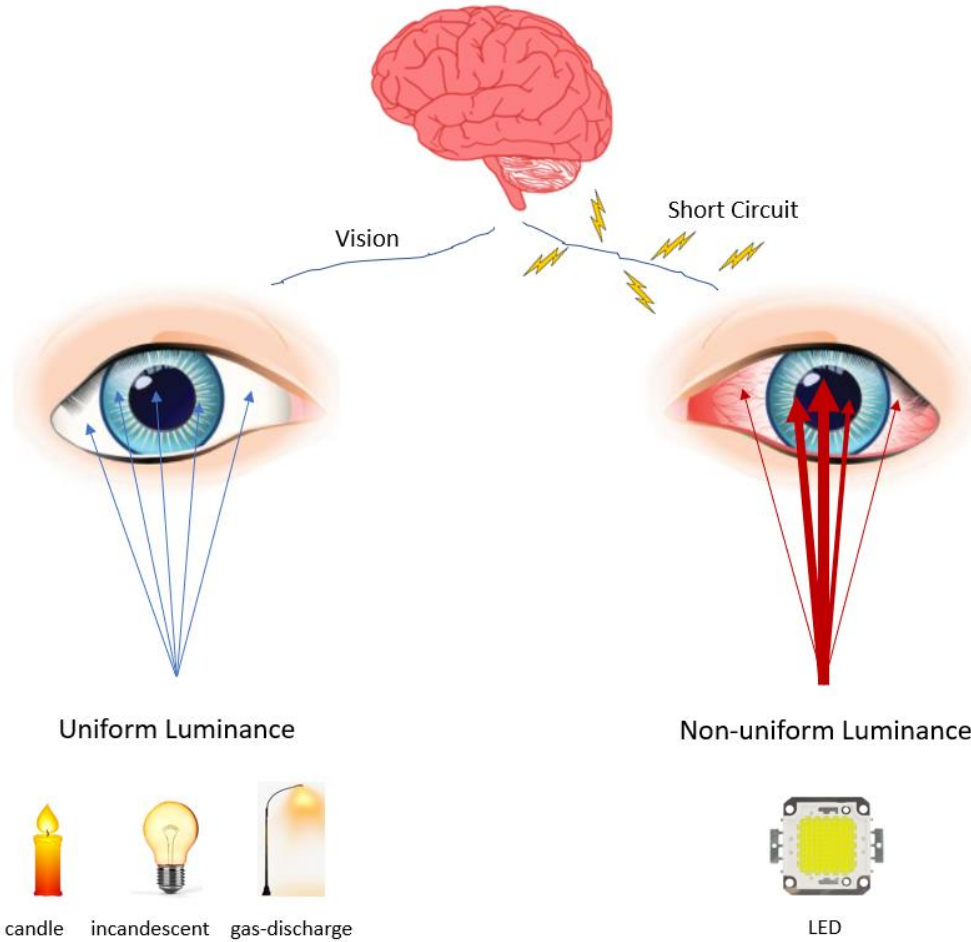


Figure 2 - Spatially Uniform v. Non-Uniform Radiation

Figure 3 is a diagram showing the categorization of radiation and shows that *light* and *illumination* are spatially isotropic radiation in the human visible portion of the electromagnetic spectrum. Electromagnetic radiation emitted by LEDs do meet the regulatory meaning of or comply with standards for the use of light as illumination.

## Regulatory Meaning of Light and Illumination

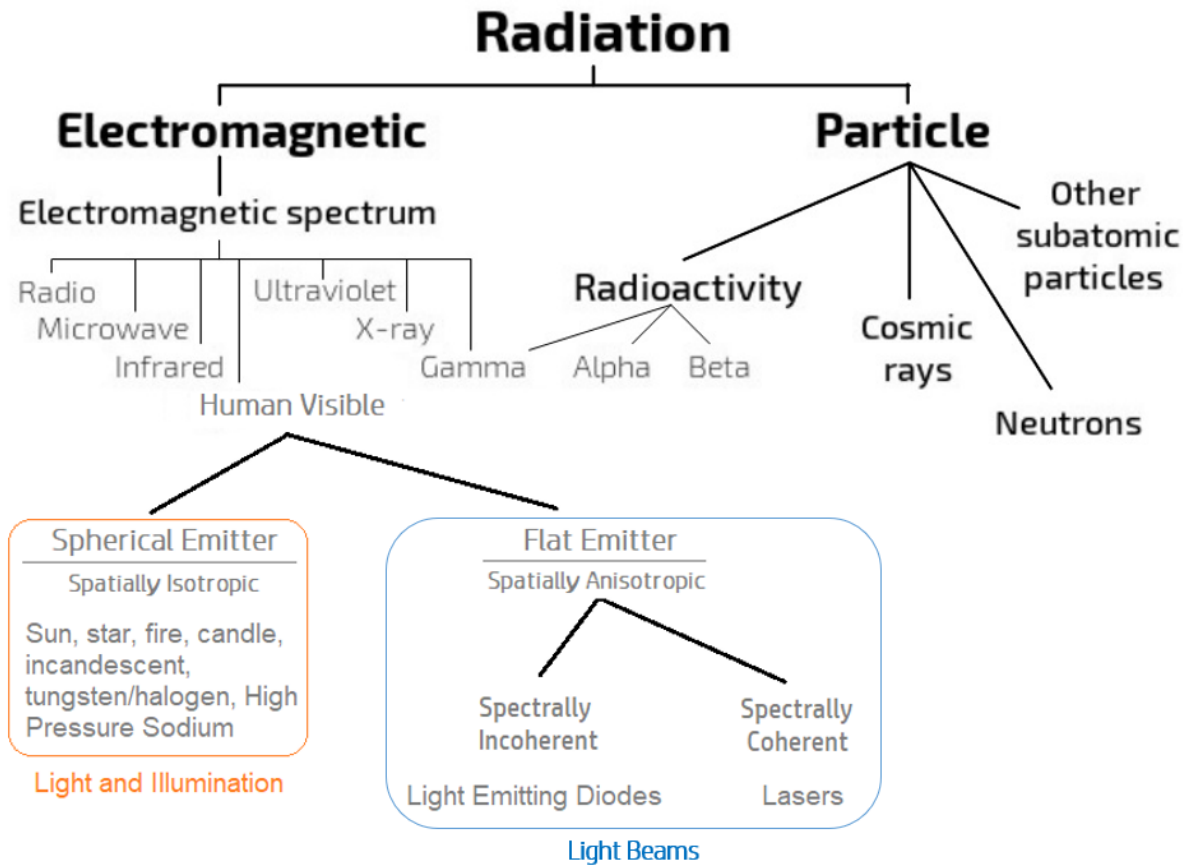


Figure 3 - Radiation Types

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.

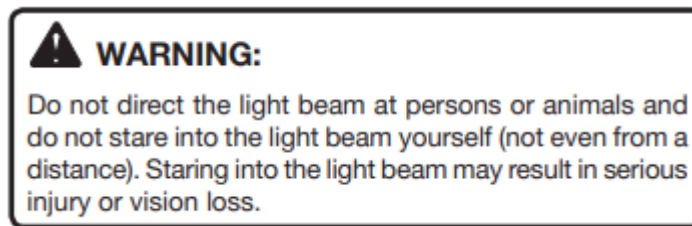
Figure 4 is a photograph of the inside of the Safeway in Ashland, Oregon. I spoke with the manager of the store on January 6, 2022, and he informed me that these overhead lights are fluorescent. I stated that I agreed with him because I did not find these lights to be too objectionable. However, the manager informed me that Safeway intends on replacing these fluorescent lights with LED devices. The installation of LED lights will prevent me from being able to access the store because of my autism. My nerves do not tolerate the toxicity of LED electromagnetic radiation. Therefore, I am notifying Safeway that they must not install LEDs at their store. LEDs are toxic, hazardous, and discriminatory, and they will prevent people with autism, epilepsy, migraines, and others with disabilities from accessing the Safeway, which is a violation of the Americans with Disabilities Act. The

Soft Lights Foundation has posted a list of conditions that cause photosensitivity and who are susceptible to LED discrimination.<sup>5</sup>



Figure 4 – Ashland, Oregon Safeway

As an example of how dangerous LED radiation is, the operator’s manual for the Ryobi P705 Flashlight includes the following: “WARNING: Do not direct the light beam at persons or animals and do not stare into the beam yourself (not even from a distance) Staring into the light beam may result in serious injury or vision loss.”



The warnings also refer to children, who along with infants are an identified high-risk population vulnerable to LED-exposure harm. Babies often lack an adult’s automatic, self-protective aversion response to bright or intense light, and will stare directly at the source. If Safeway installs LED light beam devices inside the store, babies in strollers will most likely suffer eye damage and/or psychological trauma due to staring straight into the LED devices overhead.

The Safeway in Ashland has already installed several LED strip-lights in the coolers and refrigerator sections. These LED strip-lights are debilitating for me and prevent me from safely navigating through your store. I find these LED strip-lights to be discriminatory and I request that they

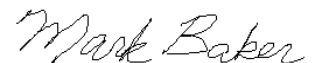
<sup>5</sup> <http://www.softlights.org/wp-content/uploads/2021/12/Photophobia-Conditions.pdf>

be removed. We know from our members that LED strip-lights will also cause migraines, seizures, and agitation and most likely chemical and/or thermal damage to the eye.

The result of exposure to LED radiation is immediate sickness in the form of headaches, nausea, eye pain, loss of balance, migraines, panic response, altered vision, epileptic seizures, disorientation, and other neurological disturbances. Each of these symptoms is being verifiably reported by an increasing number of individuals and constitute medical evidence of LED-induced harm. LED visible radiation exposure is causing catastrophic physical harm, subjecting at-risk individuals to illness and injury, and plunging formerly healthy, independent people into crisis levels of stress, hopelessness, psychological trauma, and persistent thoughts of suicide.

The fact that LED devices are toxic, hazardous, and discriminatory and do not comply with regulations and standards makes Safeway liable for the harm and discrimination they cause. To protect human health and reduce liability, Safeway must not install LED devices and must replace existing LED devices, both inside the store and in the parking lots.

Sincerely,



Mark Baker  
President

Soft Lights Foundation

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