

November 16, 2021

To:

Craig Menear, CEO
Home Depot
2455 Paces Ferry Road
Atlanta, GA 30339-1834
Craig_Menear@homedepot.com

Re: Spatially Anisotropic Visible Radiation

Dear Craig Menear,

We wish to alert the Home Depot to liability issues related to spatially anisotropic radiation from Light Emitting Diodes. Figure 1 is a diagram showing the categorization of radiation. As we can see in the chart, candles, incandescent light bulbs, and High-Pressure Sodium lamps are all spatially isotropic radiation sources. LEDs, on the other hand, emit spatially anisotropic radiation.

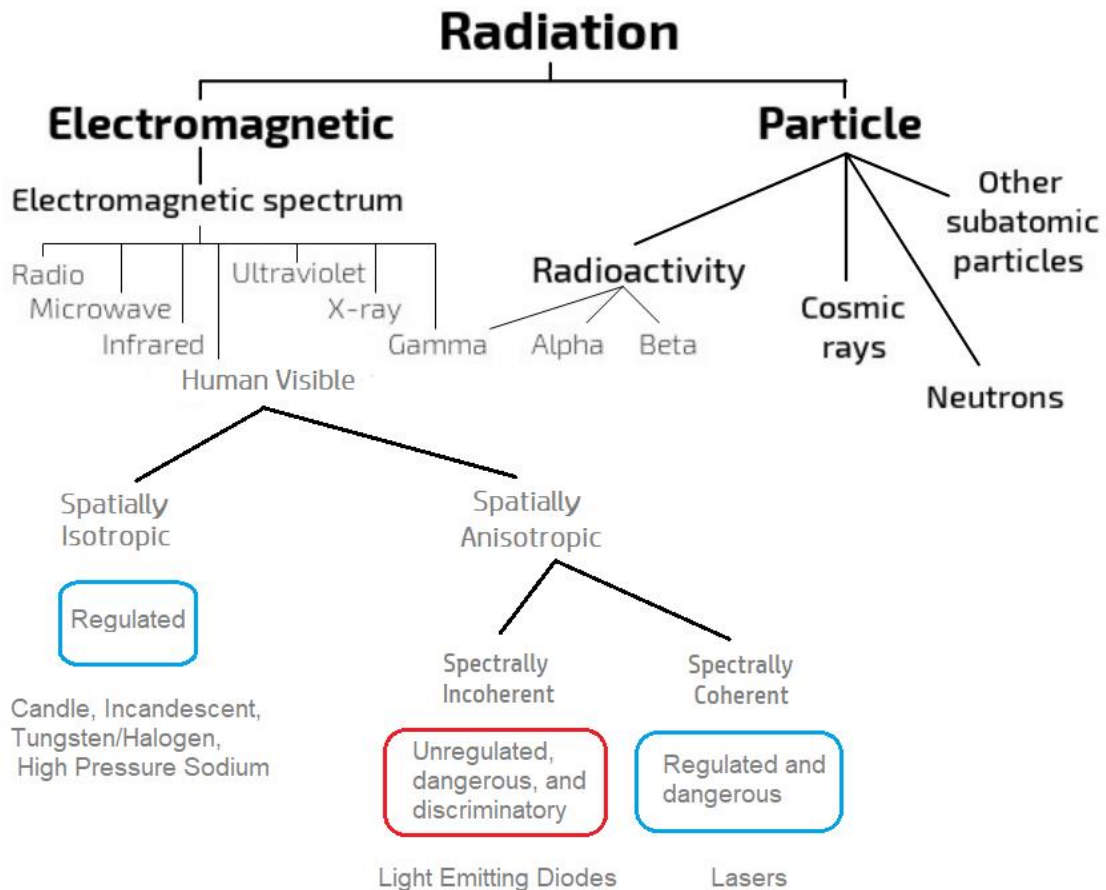


Figure 1 - Radiation Types

LEDs are not “energy efficient” as claimed by Home Depot¹. To be energy efficient, a technology must provide the same quality of service and perform the same task as the previous technology. The task in this situation is to provide uniform illumination without harm. Since LED radiation does not provide uniform illumination, and since the LED radiation is sending people to the hospital, causing eye damage, and violating civil rights, LED radiation is not energy efficient and therefore should not be used for the purpose of illumination. Here are two claims by Home Depot. Claim 1: “Energy efficiency is one of the most important LED light advantages”. Claim 2: “LED lighting is an energy-saving alternative to traditional incandescent bulbs.” Both claims are fraudulent.

To our knowledge, there are no ocular exposure standards for LEDs. In his 2009 presentation, Senior Engineer Michael Shulman of Underwriters Laboratories wrote, "Currently, neither the U.S. nor Canada have mandatory standards or regulations for ocular exposure to LEDs emitting incoherent visible light."² In the research article, titled Light Emitting Diode Induced Retinal Damage³ the authors state, "*Excessive LED light exposure presents a potential hazard to retinal function.*" In other research, those in Risk Group 3 (those with epilepsy, autism, migraines, photophobia, etc.) are often purposely ignored during the research, invalidating results that might have shown that LEDs are safe.

LED lights do not comply with existing standards, emit dangerous radiation, discriminate against persons with light sensitivity disabilities and have unregulated spatial, temporal, and spectral characteristics. LED lights have been shown to cause pain, sickness, eye damage, seizures, migraines, emotional trauma, and thoughts of suicide. The fact that LEDs are unregulated and lack standards, cause sickness and eye damage, interfere with the human nervous system, and discriminate against people with light sensitivity disabilities makes Home Depot liable for the harm and discrimination they cause because Home Depot sells devices that emit LED radiation.

Home Depot must remove all claims from its website and marketing materials that LEDs are energy efficient. In addition, to protect human health and reduce liability, Home Depot must prominently notify the public that LEDs emit toxic radiation.

Sincerely,



Mark Baker
President

Soft Lights Foundation
mbaker@softlights.org

9450 SW Gemini Drive PMB 44671
Beaverton, OR 97008

¹ <https://www.homedepot.com/c/ab/types-of-led-lights/9ba683603be9fa5395fab9011a91d53>

² http://www.softlights.org/wp-content/uploads/2021/10/MichaelShulman_LEDFireElectricalSafety.pdf

³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5313540/>

