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PMB 44671  
Beaverton, OR 97008

September 22, 2023

**BY EMAIL**

Steven Gordon, Director  
California Department of Motor Vehicles  
Steve.Gordon@dmv.ca.gov

**Re: LED Vehicle Lights**

Dear Steven Gordon,

There is an urgent need for the California DMV to act to protect the public and first responders from the harms of excessively intense, unregulated LED lights on vehicles, including LED headlights and LED flashing lights on emergency vehicles.

On September 7, 2023, the Food and Drug Administration published citizen petition FDA-2023-P-3828 to regulate LED lights on vehicles.<sup>1</sup> The Soft Lights Foundation filed this petition because both NHTSA and the FDA have failed to publish performance standards for peak luminance, dispersion characteristics, spatial uniformity, spectral power distribution, square wave flicker, pulse width modulation, and flashing characteristics for LED vehicle lights and because the FDA has the Congressional mandate to minimize exposure and protect the public from the harms of electromagnetic radiation from electronic products as per 21 U.S.C. 360hh - 360ss.

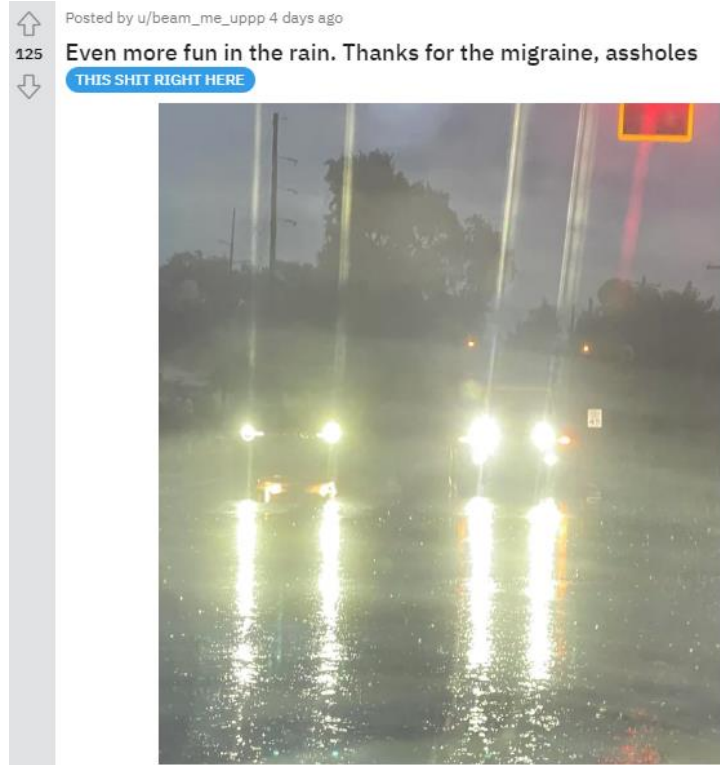
LED headlights cause blinding glare, putting driver and pedestrian safety at risk. The public is demanding that the use of blinding LED headlights be prohibited. For example, the change.org petition to ban blinding LED headlights is nearing 50,000 signatures<sup>2</sup> and is receiving media coverage.<sup>3</sup> The 20,000 members of the Reddit subgroup /fuckyourheadlights regularly post evidence of blinding glare, such as the example below.

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<sup>1</sup> <https://www.regulations.gov/document/FDA-2023-P-3828-0001>

<sup>2</sup> <https://www.change.org/p/u-s-dot-ban-blinding-headlights-and-save-lives>

<sup>3</sup> <https://6abc.com/blinding-headlights-bright-lights-while-driving-soft-foundation/13118607/>



On August 20, 2020, NHTSA Safety Compliance Engineer LeRoy Angeles sent a letter acknowledging that LED conversion kits are prohibited.<sup>4</sup> However, there is no enforcement.

On July 28, 2023, California Congressman Mike Thompson sent a letter to FDA Commissioner Robert Califf requesting that the FDA publish the required performance standards for LED headlights, as required by 21 U.S.C. 360ii.<sup>5</sup> The FDA has not acted.

There are currently no federal regulations for LED flashing lights. The Soft Lights Foundation submitted citizen petition FDA-2023-P-0233, requesting that the FDA comply with 21 U.S.C. 360ii and publish performance standards for LED flashing/strobing lights.<sup>6</sup> The FDA has not acted on this petition.

In August 2023, the DMV notified Cruise and Waymo that they must reduce their robotaxi fleet in San Francisco due to safety concerns.<sup>7</sup> The Soft Lights Foundation notified Cruise, Waymo, the city of San Francisco, and members of the legislature that one of the major safety issues is the use of LED strobe lights on emergency vehicles such as fire trucks and police cars. These LED flashing lights interfere with vision and cognitive functioning for both human and Artificial Intelligence systems. There have been numerous reports of automated vehicles crashing into emergency vehicles that were using LED flashing lights. The photo below shows a robotaxi in San Francisco and the police vehicle using blinding LED flashing lights.

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<sup>4</sup> <https://www.softlights.org/wp-content/uploads/2023/09/Leroy-Angeles.pdf>

<sup>5</sup> <https://www.softlights.org/wp-content/uploads/2023/07/Thompson.pdf>

<sup>6</sup> <https://www.regulations.gov/document/FDA-2023-P-0233-0001>

<sup>7</sup> <https://www.cnbc.com/2023/08/19/cruise-will-reduce-robotaxi-fleet-by-50percent-in-san-francisco.html>



This video shows multiple examples of emergency vehicles using LED strobe lights. WARNING: SEIZURE TRIGGER! <https://youtu.be/AIDZYNVcuLY>

LED flashing lights trigger seizures, migraines and panic attacks. LED flashing lights create discriminatory barriers which prevent equal access to public services and thus are a violation of the California Unruh Civil Rights Act, Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act.

The Soft Lights Foundation is working to protect citizens from the harms of unregulated LED lights on vehicles. As we saw in the San Francisco robotaxi situation, DMV can act to remove unsafe vehicles from California's roads. Because the federal government has abdicated their responsibility for protecting the public, we request that the California DMV use their considerable enforcement powers to solve this problem. For example, DMV could prohibit the use of LED flashing lights until the FDA publishes the required performance standards. Also, DMV could use the existing smog-check stations to check for prohibited aftermarket LED headlight conversions.

I request a video meeting with a staff member from your office to discuss this situation. Thank you for your consideration of this important topic.

Sincerely,  
/s/ Mark Baker  
President  
Soft Lights Foundation  
[mbaker@softlights.org](mailto:mbaker@softlights.org)