

## Mark Baker <mbaker@softlights.org>

## Flat Surface Source Headlights

Mark Baker <mbaker@softlights.org> Draft Fri, Mar 4, 2022 at 6:43 AM

From: Mark Baker <mbaker@softlights.org>

Date: Fri, Mar 4, 2022 at 6:42 AM Subject: Flat Surface Source Headlights

To: <anne.collins@dot.gov>

Cc: Angeles, Leroy (NHTSA) < leroy.angeles@dot.gov>

Dean Anne Collins, Associate Administrator for Enforcement, NHTSA,

On March 4, 2022, NHTSA determined that certain General Motors vehicles do not meet NHTSA FMVSS-108 headlight requirements and ordered a recall.

https://www.federalregister.gov/documents/2022/03/04/2022-04540/general-motors-llc-denial-of-petition-for-decision-of-inconsequential-noncompliance

We applaud and agree with NHTSA's analysis and decision to order the recall. However, NHTSA has not yet addressed GM's use of non-compliant LED headlights, which are a far more significant hazard.

There are now two types of light sources: point sources which measure brightness using luminous intensity in candela, and flat surface sources which measure brightness using luminance in candela per square meter (nits). FMVSS-108 is only applicable to point sources whose brightness can be measured in candela.

The brightness of flat surface sources such as LED must be measured in candela per square meter (nits) and in near-field conditions (approximately 1 micrometer). For example, an LED TV will say that it is rated at 300 nits. FMVSS-108 does not address flat surface LED sources, and therefore is not applicable to LED headlights. Stated another way, NHTSA has no regulations for LED headlights and NHTSA has never approved LEDs for use as vehicle headlights.

LED headlights are incredibly dangerous and vehicles using these unapproved headlights must be recalled, just as NHTSA recently ordered the recall of 727,000 GM vehicles that do not comply with FMVSS-108. The petition to ban blinding LED headlights now has over 30,000 signatures, which is 5 times as many people who notified NHTSA of overly bright halogen headlights. https://www.change.org/p/u-s-dot-ban-blinding-headlights-and-save-lives Glare from LED headlights is an extremely serious issue.

I am attaching our recent letter to General Motors regarding this situation. I am also copying GM General Counsel Craig Glidden in this email.

For consistency sake and for safety sake, NHTSA must order GM to recall all vehicles with flat surface source headlights and replace them with point source headlights.

Sincerely,

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

