



NHTSA Interpretations 2006 - FMVSS 108 RELATED

Date	Docket#	
1/03/06	23516	<p>Responded to Koito request for clarification regarding a Combination LED Integral Beam/RBHL system.</p> <p>The definition of the term “integral beam headlamp” does not place a limitation on the number of light sources in such lamp. However, under S7.4(b), there are locational requirements which correspond to whether each headlamp has one or two light sources. A combination headlighting system with an integral beam lower beam headlamp using LEDs would be permissible, if such LEDs are wired in series.</p> <p>The optical center should be determined as the geometric center of the portion of the lens that is illuminated by the LED light sources, assuming no optics.</p>
1/05/06	23573	<p>The “Driver Alert Device”, an LED message board mounted on the school bus emergency door that is wired to flash a warning or caution message.</p> <p>NHTSA defers to the States with respect to the narrow issue of prescribing or prohibiting electronic message boards on school buses. FMVSS 108 S5.5.10 regarding which lamps can flash and S5.1.3 Impairment may be a concern.</p>
1/04/06	23575	<p>Noted that motorcycle headlamps must be located on the front and on the vertical centerline or horizontally disposed about the vertical centerline.</p>
1/05/06	23577	<p>Regarding LED Bundle replacement bulbs for incandescent miniature bulbs should be regarded as a single source of all LEDs are in series, a two source lamp if there are two series in parallel, etc.</p> <p>It would be permissible to use a red bulb and a clear lens in tail or stop application.</p>
2/10/06	23973	<p>If a headlamp system meets the static aiming hardware requirements of FMVSS No. 108, a dynamic aiming feature is permissible.</p> <p>Regarding "bending light" or swiveling beam headlamp; photometry requirements must be met in the nominal position of the lower beam headlamp (i.e. considering the location of the axis of reference to coincide with the longitudinal axis of the vehicle).</p> <p>FMVSS 108 does not include photometric test requirements for a headlamp with a bending light function other than for the nominal position of the lower beam headlamp.</p> <p>In this case, only one of the two lower beam light sources had the swiveling feature.</p>
6/07/06	25023	<p>FMVSS No. 108 does not prohibit LED or other undercarriage lighting devices, provided they are steady-burning (see S5.5.10), and do not impair the effectiveness of required lighting equipment.</p>

See following pages for additional NHTSA interpretations

NHTSA Interpretations 2006 - FMVSS 108 RELATED (Cont.)

Date	Docket#	
8/24/06	25729	<p>A lamp (or other item of lighting equipment, as relevant) manufactured to replace a lamp on a vehicle to which the standard applies is permitted under S5.8.1 so long as the vehicle manufacturer could have certified the vehicle to FMVSS No. 108 using the replacement lamp instead of the lamp it actually used.</p> <p>Replacement lamps are not required to have the same light sources as OE lamps.</p>
10/05/06	26055	<p>FMVSS 108 prohibits additional optional red and amber warning lights for the left and right sides of a school bus mostly for S5.1.3 impairment reasons. The system would add an unfamiliar dimension to a standardized system.</p>
10/19/06	26137	<p>Retroreflective tape mounted on truck and trailer wheels would likely impair the effectiveness of required lighting on the vehicle because this material would be mounted at approximately the same height as some of the lighting equipment required by FMVSS No. 108. Particularly given the fact that this material would be spinning as a result of wheel motion, we believe that this would be distracting to other drivers (FMVSS 108 S5.1.3 Impairment).</p>
10/19/06	26148	<p>A manufacturer of new transit buses would not be permitted to install destination signs on the front of a vehicle that illuminate in red, green, or blue, because the lighting devices in those colors could impair the effectiveness of other frontal lighting equipment required under FMVSS No. 108 S5.1.3.</p>
10/20/06	26150	<p>A motorcycle modulating headlamp system that complies with FMVSS 108 S7.9.4 is permissible.</p>
11/21/06	26430	<p>Questions relating to the standard's requirements for effective projected luminous lens area, including the permissibility of using light-emitting diodes (LEDs) to meet those requirements.</p> <p>Did not give clarification of the legal definition of "Effective Projected Luminous Lens Area" or "Effective Light Emitting Surface" including whether there have been any recent amendments or interpretations to that aspect of the standard as requested.</p> <p>Noted that FMVSS 108 S5.1.26 requires that stop and turn signal lamps must have EPLLA of $\geq 50 \text{ cm}^2$.</p> <p>Noted that SAE documents subreferenced by FMVSS 108 (SAE J1395 and J1398) requires that stop and turn signal lamps must have EPLLA of $\geq 75 \text{ cm}^2$.</p> <p>Did not address how to determine EPLLA of LED lamps because the submitter did not phrase the question correctly.</p>

Procedure For Downloading NHTSA Interpretation Document

1. Go to www.Regulations.gov.
2. Enter "2006-docket number" in the **Enter Keyword or ID** field.
3. Click **Search**.
4. In the **Agency** section, choose "NHTSA" if large number of results are listed.
5. In the **Actions** column, click **Open Docket Folder**. This will take you to a **Docket Folder Summary** page.