A Market-Weighted Description of Low-Beam and High-Beam Headlighting Patterns in the U.S.: 2011

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This study was designed to provide updated photometric information about current U.S. low-beam and high-beam headlamps. The sample included 25 tungsten-halogen headlamps manufactured for use on model year 2011 passenger vehicles in the U.S. The vehicle models were randomly sampled from the top 90% of all vehicles sold in the U.S. The lamps were purchased directly from vehicle dealerships.

The photometric information for each lamp was weighted by the sales figure for the corresponding vehicle. The results are presented in tabular form for the 25th-percentile, 50th-percentile (median), and 75th-percentile luminous intensities (from 45° left to 45° right, and from 5° down to 7° up). The results are also presented in graphical form as isocandela diagrams (from 45° left to 45° right, and from 10° down to 10° up), as well as isoilluminance diagrams of the illuminance incident at various locations on the roadway.

headlighting, headlamps, photometry, U.S., low beams, passing beams, high beams, main beams, sales, market-weighted

Unlimited

None

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