Recent Trends in the Performance of Tungsten-Halogen and HID Low Beams in the U.S.

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This report (1) presents photometric data for a sample of high-intensity discharge (HID) low beams for model year 2004 vehicles in the U.S. and for the corresponding tungsten-halogen low beams manufactured for use on the same vehicles, and (2) analyzes the technological and photometric trends for low-beam headlights in the U.S. from 1997 to 2004. There are two main findings. First, from 1997 to 2004 there was a general photometric improvement of both tungsten-halogen and HID low beams. Second, the photometric performance of the current HID low beams is superior to that of the current tungsten-halogen low beams.