

*Publication of a comprehensive evaluation of replacement brake pads for police patrol vehicles, administered by the Michigan State Police Vehicle Test Team for NLECTC-National, took place October 2010. The evaluation project, conducted during summer 2010, provided law enforcement agencies across the country with information that will help them make informed decisions regarding replacement brake pads.*

Conducted in two stages, Stage 1 of the evaluation involved laboratory tests executed by Greening Testing Laboratories, Inc., using 'matched sets' of replacement brake pad materials in dual dynamometer test facilities. The laboratory used requirements of Federal Motor Vehicle Safety Standards (FMVSS) 135 as the standard for testing. Michigan State Police (MSP) Precision Driving Unit staff conducted Stage 2 testing at the Chrysler Proving Grounds in Chelsea and the Grattan Raceway Park in Belding.

For Stage 1, MSP solicited candidate aftermarket brake pad material samples from 28 different manufacturers offering 'severe duty' products for police vehicles and also posted a solicitation notice on the iFriction website (<http://www.factsaboutfriction.com/>). The top three aftermarket candidate brake pads in each vehicle category following Stage 1 testing moved on to Stage 2.

In Stage 2, MSP used four full-service police vehicle models for the evaluation: the Ford CVPI, Dodge Charger 5.7L, Chevrolet Impala and Chevrolet Tahoe. One vehicle from each category was equipped with a control sample fitted with OE brake pad materials included for comparison purposes. All vehicles in the evaluation were tested with OE brake rotors. Tests consisted of measured straight line stops from two different speeds and timed laps around an enclosed road course.



Results show significant differences among the various brake pads submitted for evaluation. Differences between the aftermarket pads tested and the OE pads have been quantified. The final test report, identifying the friction materials and performance results, is available from NLECTC-National.

This aftermarket brake pad evaluation did not address brake noise, normal wear life or friction material chemical compositions, including heavy metals.

For more information on the brake pad evaluation tests, please see <http://www.justnet.org/pdf/copy-of-9-22-10-Edited-Brake-Pad-Report-Draft.pdf>. For more information about the full range of NLECTC's products and services, visit us on the web at <http://www.justnet.org>, or call us toll free at (800) 248-2742.