



General Section – 2008

D78 Measurement of Lighting Conditions at a Police Traffic Stop

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After attending this presentation, the attendees will become familiar with the testing program being developed by NIST and used by IACP.

The presentation will impact the forensic science community by serving as the basis for a testing program being developed by NIST and used by IACP to help police agencies purchase quality systems and obtain useful forensic video.

In-car video recording is growing rapidly but there are no standards for the systems purchased by police agencies. To help assure that agencies purchase quality systems the International Association of Chiefs of Police has led a program to develop standards. As part of that effort, the National Institute of Standards and Technology has developed a prototype testing device in the form of a complex scene generator. To provide guidelines for inputs into the design of scene content, the light available at a traffic stop was measured. Specifically, measured were aggregate color temperature, spectral reflectance of typical scene contents and reflectance of light from key elements such as the target car, its license plate, and the officer at the side of the target car. In addition measurements were made of the dynamic range of typical video camera systems. It was found that the color temperatures were very much as expected, the spectral reflectance were not highly selective and the range of reflectance from key scene elements was greater than the dynamic range of the typical camera system.

Lighting, In-Car Video, Traffic Stop