



COMMONWEALTH of VIRGINIA

Department of General Services

Division of Purchases and Supply

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Police Chiefs, Sheriffs, and Law
Enforcement Authorities in the
Commonwealth of Virginia

SUBJECT: Devices Used to Measure Light Transmittance Through Vehicle Windshields and Windows

Sections §46-2-1052 and 1053 of the Code of Virginia requires the Division of Purchasing and supply (DPS) to determine standards for portable devices used to measure light transmittance through vehicle windshields and windows. Therefore, DPS developed Virginia Standard No. 493-72-010 to cover such devices used within the Commonwealth of Virginia for Law Enforcement purposes. DPS has determined that the following Light Transmittance Meters comply with Virginia Standard No. 493-72-010:

Advanced Design Systems "Advanced Light Transmittance Meter" two-piece unit
Source is Advanced Design Systems, P.O Box 893459, Milliani, Hawaii 96789 (800) 865-1820

Laser Labs "Tint Meter Model 100 single piece unit"
Laser Labs "Tint Meter Model 200 two piece unit"
Source is Laser Labs, 454 First Parish Road, Scituate, Mass 02066, (800) 452-2344, FAX (508) 923-1985
sales@laser-labs.com

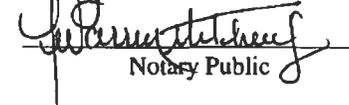
Monroe PMP (Promotorcar Products) "Pocket Detective single piece base unit, model #801-0" (Roll-down windows only)
Monroe PMP (Promotorcar Products) "Pocket Detective Deluxe, model #804-0" (Fixed and roll-down windows)
The Monroe tint meters are sold through Promotorcar Products, 1030 Doris Road, Auburn Hills, MI 48236
(248) 292-5700, FAX (248) 475-1689
www.promotorcarproducts.com

Two reference samples are required for each Light Transmittance Meter; one in the 15 to 35 percent range and one in the 50 to 80 percent range. The meter must be checked with the two reference samples prior to each use to verify meter accuracy. Reference samples must be recalibrated at least once per year by the Meter Manufacturer or by the Division of Consolidated Laboratory Services.

Sincerely,

Laurie R. Sparkes
Architect/Engineer I
Division of Purchasing and Supply
Department of General Services
Voice Number: (804) 371-8354
FAX: (804) 786-5712

Subscribed and sworn before me this 7th day of February 2011

My Commission expires: August 31, 2014

Notary Public

c. Attorney General
Director, DGS/DPS
Superintendent, DSP
Deputy Director, DCI



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF PURCHASES AND SUPPLY
STANDARDS FOR DEVICES USED TO MEASURE LIGHT
TRANSMITTANCE THROUGH VEHICLE WINDSHIELDS AND WINDOWS

§1. SCOPE.

This standard covers portable devices used within the Commonwealth of Virginia to measure light transmittance through vehicle windshields and windows pursuant to Sections 46.2-1052 and 46.2-1053 of the Code of Virginia. These devices may be a single unit or a two-piece unit. Such devices shall be provided with two standardized reference samples with light transmittance in the range of 30% and the range of 65%. The device light source shall be approximately midrange in the visible spectrum and shall exclude the ultraviolet and infrared spectrum.

§2. DEFINITIONS.

The following words and terms, when used in these regulations, shall have the following meaning, unless the context clearly indicates otherwise:

"Light Transmittance Measuring Device" means an instrument with a calibrated photo cell capable of measuring transmittance of light.

§3. REFERENCES:

The standardization of reference samples shall be traceable to the National Institute of Standards and Technology (NIST).

§4. DESIGN CONFIGURATIONS:

- A. Single unit light transmittance measuring devices shall be compact with automatic on/off switch, digital readout to nearest percent, and suitable for sliding onto rolled down windows with up to 1/4 inch glass thickness.
- B. Two-piece unit light transmittance measuring devices shall be designed to be operated by one person on front windows, non-roll-down side windows and rear windows with up to 3/8 inch glass thickness. Two-piece unit shall have digital readout to nearest

percent and an alignment aide feature to maintain stable alignment throughout the period of measurement. Activation may be manual or automatic.

§5. PERFORMANCE REQUIREMENTS:

- A. Light transmittance measuring devices shall maintain unit accuracy within + or - 2.0 percentage points of reference samples, and shall maintain repeatability within + or - 1.0 percentage point. If the supply voltage is outside of the device's operating range, the device shall either produce a low battery signal or shall not produce an output reading, or both.
- B. Reference samples shall be either glass or plastic based with a thickness of 1/8 inch to 1/4 inch and stable for at least one year. Reference samples shall provide a uniform surface reading with a variation not to exceed 1.0 percentage point as measured by a calibrated Spectrophotometer. Reference samples shall be permanently labeled or inscribed with the manufacturer's name and address, specific identification number, percent of light transmittance, and preparation date. Reference samples shall be recalibrated at least once per year by the manufacturer's qualified laboratory, the

Division of Consolidated Laboratory Services (DCLS), or other laboratories certified by DCLS.

- C. All devices used within the Commonwealth of Virginia to measure light transmittance through vehicle windshields and windows shall comply with this standard as approved by the Division of Purchases and Supply (DPS).

§6. RECONSIDERATION OR REVISION OF REGULATION:

The Agency will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision of this regulation.

DGS, Division of Purchases & Supply

VR 330-04-04, STANDARDS FOR DEVICES USED
TO MEASURE LIGHT TRANSMITTANCE THROUGH VEHICLE
WINDSHIELDS AND WINDOWS

SUBMITTED BY:

June 9 1993
Date

Donald F. Moore
for Donald F. Moore, Director
DGS, Division of Purchases & Supply

THROUGH:

06-11-93
Date

Ruby G. Martin
Ruby G. Martin
Secretary of Administration

APPROVED BY:

6-23-93
Date

L. Douglas Wilder
L. Douglas Wilder, Governor

FILED WITH:

6/24/93
Date

Joan W. Smith
Joan W. Smith
Registrar of Regulations