

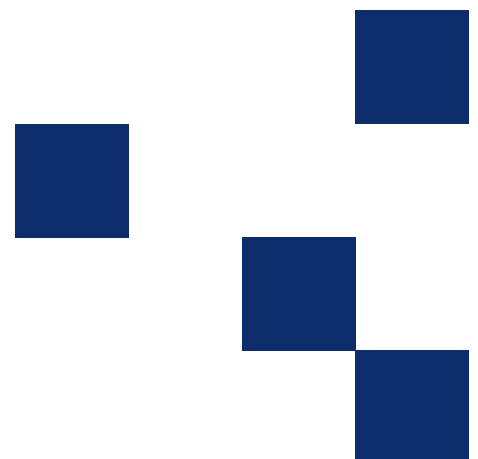


Transport
Roads & Maritime
Services

Test method T1227

Field measurement of retro-reflectivity by Mirolux 12

NOVEMBER 2012



Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D.Dash	June 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	November 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T1227 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T1227

Field measurement of retro-reflectivity by Mirolux 12

1. Scope

This method sets out the procedure to determine the retro-reflectivity of road marking materials using the Mirolux 12 photometer.

2. Apparatus

- (a) MIROLUX 12 photometer
- (b) Plastic foam shroud to exclude stray light

3. Setting Up the Mirolux 12 Photometer

- (a) Place the MIROLUX 12 instrument on a flat surface with the door on the side facing you. On the left end of the instrument is a recessed section containing from bottom to top: recharging plug, on/off switch, two fuses and knob for the calibration plate.
- (b) Move the on/off switch to the ON position.
- (c) Allow the instrument to warm up for three (3) minutes.
- (d) Using the “zero adjust knob” is locked, which is farthest away on the top left side; adjust the digital display to read 000.

If the “zero adjust knob” is locked, push the lever at the bottom of the knob away from you.

- (e) The digital display should remain at zero for three minutes.
- (f) Turn the light switch next to the “zero adjust knob” to the “ON” position.
- (g) Using the calibration knob closest to you in the top recess adjust the calibration reading to the value recorded adjacent to the digital display unit.

Ensure the knob for the calibration plate at the top of the left end is completely pushed in during calibration.

- (h) The calibration should be checked and adjusted regularly (approximately every 10 readings).
- (i) The condition of the batteries can be checked by pushing the red button directly in front of the light on/off switch.
- (j) The digital display should read between 115 and 125.
- (k) If the reading is below 115 the batteries should be recharged. For each hour the batteries are used they should be charged for two hours. The batteries cannot be over charged.

4. Procedure

When measuring the retro-reflectivity of markings in the field, approximately one reading per linear metre should be made.

- (a) After the MIROLUX 12 is zeroed and calibrated, attach the plastic foam skirt and place it on the material to be measured.
- (b) Check battery voltage.
- (c) Pull out the knob for the calibration plate.
- (d) Take indicated reading.
- (e) Push in the knob for the calibration plate.
- (f) Measure the next spot by repeating steps (a) to (e).

Note: In the laboratory three readings on the same material should be ± 10 percent of the average of the readings. If not two more readings should be taken.

5. Reporting

Report the mean, standard deviation and range of the readings in millicandelas lux⁻¹ m⁻².