

EASYLUX
RETROREFLECTOMETER



Creating an entirely new design meant inventing entirely new technology.



STRONG AND MODERN

Built with modern, flexible engineering materials, the new MINI retroreflectometer is light and robust.

AA BATTERY SDCard

The MINI works with standard universal rechargeable AA batteries.

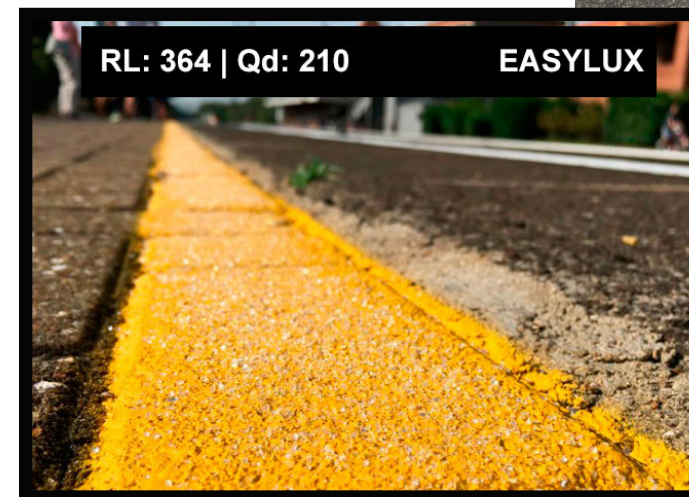
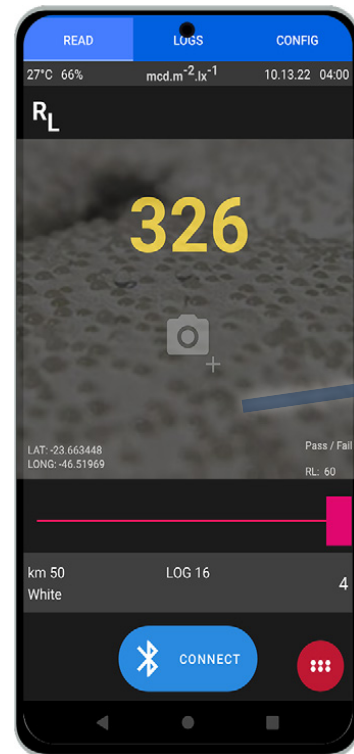
The LED optical system makes the instrument energy efficient and almost maintenance-free.

All measured data is stored as text files onto a removable SD Card.





ANDROID APP



Trigger measurements.

Share Data.

Take Pictures





HORIZONTAL

Retroreflectometer

EN1436	RL Qd
ASTM E1710	RL
GOST	R54809
ASTM E2302	Qd
ASTM E2177	RL wet
ASTM E2832	RL2 (rain)

MINI Horizontal measures the night visibility **RL**, the Day Visibility **Qd**, the visibility under wet **RL wet** and continuous wetting conditions **RL rain** of road markings.

Fast measurements: 0.6 s for RL, 0.9 s for RL + Qd.....immediately ready for next measurement.



Approved

Test Certificate No. 0913-2014-04

Our innovative technology was approved by an independent laboratory in Germany.



Approved

Certified by Russian Scientific Research Institute of Optical and Physical Measurements ~ VNIIOFI



Conditions of rain.

Continuous wetting RL-2 compatible technology.

Free access over measurement area.

ASTM E2832

EN 1436

ABNT 14723

The MINI retroreflectometer instrument has an external light beam. That is, the light shines out of the instrument housing and onto the roadway away from the instrument.

The external beam instruments are essential for measuring retroreflectivity in the falling rain condition ASTM E2832.



CIE chromaticity

The Easylux MINI for road markings can measure the nighttime reflected colour coordinates – CIE chromaticity - of white and yellow markings (EN1436 / ASTM D6628).

The MINI has an external light beam for measurements of RL, Qd and nighttime reflected colour coordinates.



MINI TECHNOLOGY

- **Avoid Airplane extra fees.**
- **Avoid battery warnings.**
- **Increase the portability.**
- **Save space on the marking truck.**
- **Eliminate the operators fatigue by muscular effort.**
- **Speed up the processes of loading and unloading.**
- **Use standard AA-size batteries: easy to find and replace.**
- **External Beam technology (allows RL-2 rain test).**
- **15 mm profiled RL measurements.**



CONVENIENT
AND
SMALLER



15 mm

Profiled road markings
with no adjustments.





VERTICAL

Retroreflectometer

ASTM E1709	0.2°
ASTM E2540	0.5°
EN 12899-1	0.2°, 0.33°, 2.0°
ISO 20471	0.2°, 0.33°, 1.0°, 1.5°
ECE 104	0.33°

It can measure up to 4 (four) simultaneous observation angles.

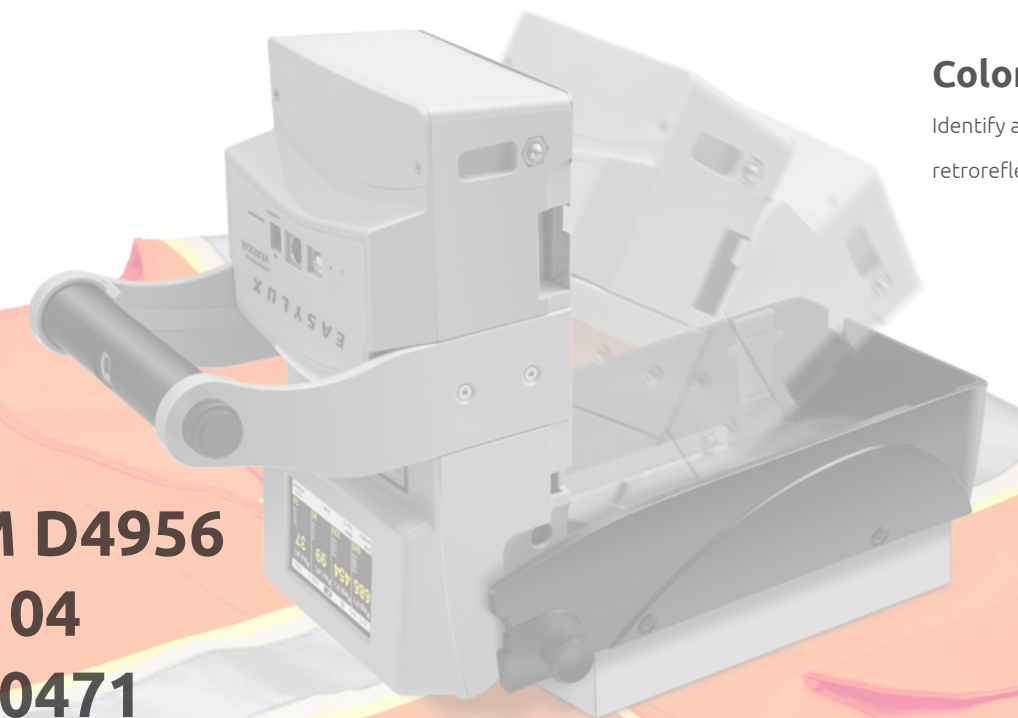
ASTM D4956
ECE 104
ISO 20471

The combination of adjustable entrance angle with the exclusive quadruple simultaneous observation angles allows precise determination of retroreflection according ISO 20471 - *High Visibility Clothing* and ASTM D4956 - *Standard Specification for Retroreflective Sheeting for Traffic Control*.

ADJUSTABLE
Illumination angle

Color Recognition

Identify and measures all types and colors of retroreflective materials.



Road Studs

Retroreflectometer

ASTM E1696	0.2° / 1°
EN 1463	0.3° / 1°

The patented optical system was designed to measure the retroreflectance R_l of RRPM on site or in a laboratory with two simultaneous observation angles of 0.2° (or 0.3°) and 1°.



FULL CONTROL

Thanks to exclusive stray light suppression technology the user has full access to the measurement area.

It makes correct field positioning and precise entrance angle control possible.

HORIZONTAL

Classic Retroreflectometer

EN1436	RL Qd
ASTM E1710	RL
ASTM E2302	Qd
ASTM E2177	RL wet

Available on :

- 15-meter geometry;
- 30-meter geometry;
- Dual 15/30 geometry.

Easylux Horizontal Classic is robust, simple and intuitive handling instrument which can simultaneously evaluate nighttime visibility (R_L), daytime visibility (Qd) and register the ambient temperature and relative air humidity quickly, easily and effortlessly.



StrAusZert Germany test certificate No. 0913-2014-04

The instrument comes with carrying case, calibration certificate, Easydata software tool, user's manual (English, Portuguese, Spanish and Italian), NIST traceable calibration standard, USB cable and a universal full-range battery charger.



VERTICAL

Classic Retroreflectometer

ASTM E1709

Available on :

ASTM E2540

- Single angle.

EN 12899-1

- Dual angle.

ISO 20471

Easylux Vertical classic retroreflectometer is the most compact dual angle retroreflectometer in the world market. Being only **180 mm wide and 860 g** weight, this practical instrument can measure the retroreflection (R_A) of all type and colors of road signs and others materials fast and effortlessly.

Color Recognition

Identify and measures all types and colors of retroreflective materials.





2 years warranty.

Easydata is a FREE software tool developed to manage measured figures of Easylux retroreflectometers.



Export XLS, KML, CSV

Google Earth compatible .

5 meter extension pole with remote control

EasyData

Software

EASYLUX Easydata - V6.0.1

Menu New Excel

Filter

km	RL	Qd	Color
0	183	180	White
0	170	66.8	Yellow
0	180	184	Red
0	215	184	Blue
0	19	0	White
0	23	0	White
0	21	0	White
0	19	34.3	White
0	130	163	White
0	275	234	White
0	171	147	White
0	246	229	White
0	190	183	White
0	278	202	White
0	190	172	White
0	275	197	White
0	259	166	White
0	152	111	White
0	278	157	White

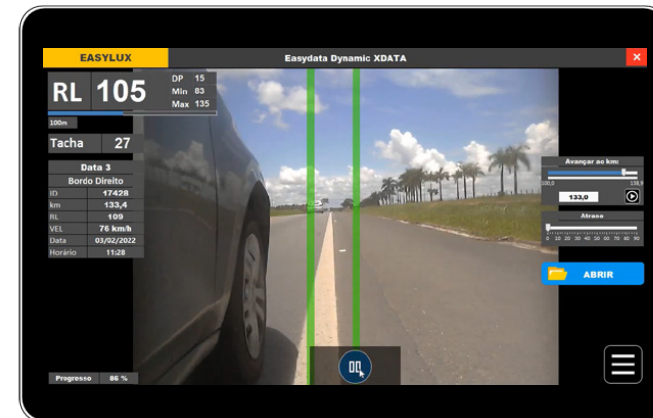
Map view showing locations marked with colored pins (Green, Yellow, Red, Blue) on a street map. Locations include Langley Lawn Bowling Club, Berry Road Apartments, Nicomekl Park, Child Care Resource & Referral, Nicomekl River Suspension Bridge, The Langley Resources Society, Blacklock Fine Arts Elementary, City Park Trail, Langley Baseball, City Park, Dinosaur park, City Park Trail, Langley Flippers Swim Club, Nash Park, ATC Consulting, St. Andrew's Anglican Church, and Trippy Bites.

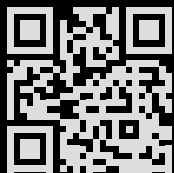


Dynamic Retroreflectometer

The LED system makes the instrument almost maintenance-free and eliminates the periodic replacement of light bulbs of old-technology devices.

Easylux Dynamic retroreflectometer complies with ASTM E1710, EN1436 and works at normal traffic speed (120 km/h) under any lighting conditions - day time or night time.





October 2015

www.easylux.com.br

