

kps' retro

The quick testing system for retroreflectors

The kps' retro compact testing system enables quick yet high-quality testing of retroreflectors while requiring a minimum of space.

Lengthy and extensive measurements in the light lab are now only required in rare cases. The test can be performed quickly and easily close to production. Even smaller companies without a complete light lab can reliably test their injection parameters with this system. This allows fast and direct correction of production parameters (e.g. injection moulding settings) even with partial components.

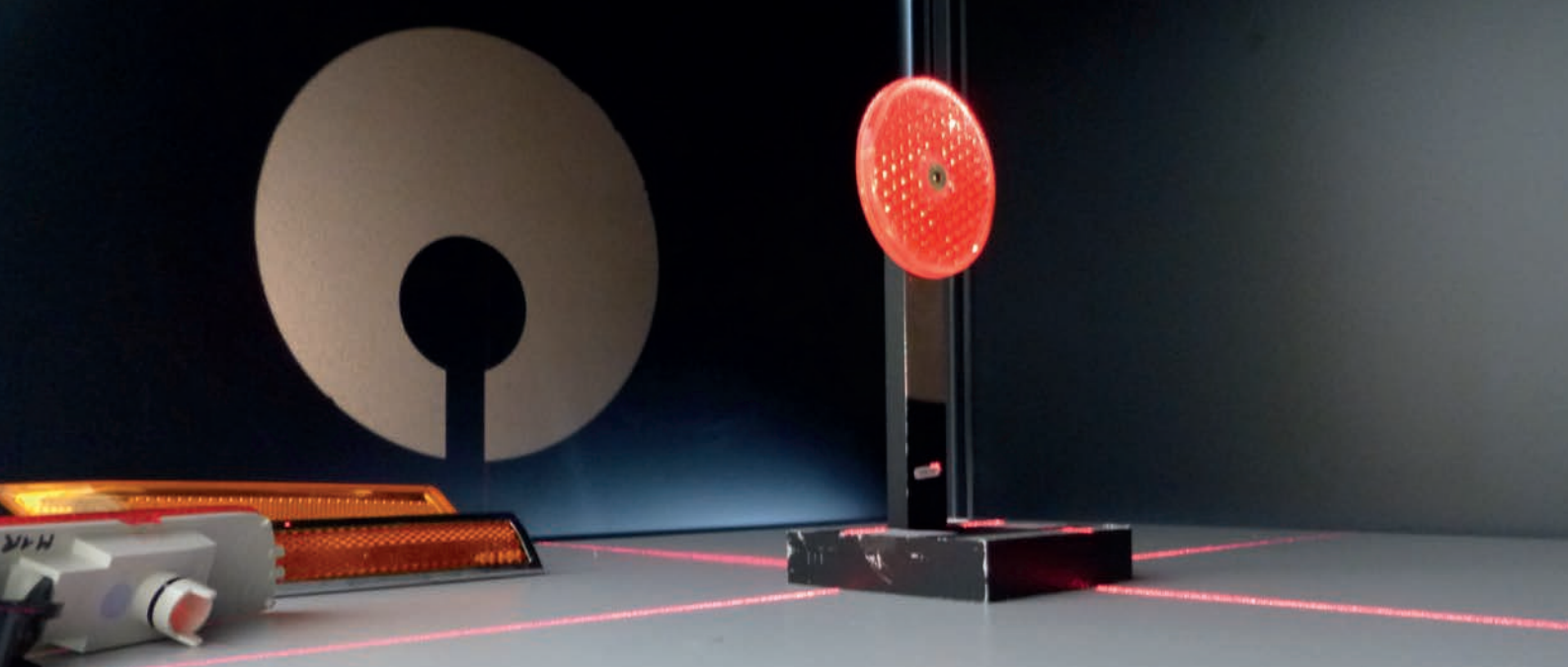
The test specimens are homogeneously illuminated with collimated light emitted by a precise projector.

The alignment is performed simply and reliably by an integrated laser. The specimens can easily be placed in the correct position using the electronically adjustable specimen table.

The two high-quality photometers (Category L) measure the retroreflection values quickly, reliably and, thanks to the optimised apertures, analogue to the specifications of the long measuring distance in the light lab.

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Illumination specifications

Illumination	Standard illuminant A
Illumination divergence	6' (0.1°)
Illuminance on test specimen	40 lx
Size of the illumination area	250 mm
Homogeneity of the illumination area	> 95 %
Illumination stability	Illumination source is burnt in

Detector specifications

Measuring distance	approx. 3 m (5 m and 10 m also possible if required)
Measuring angle	0,333° (ECE) and 1.5° (ECE/SAE), 0,2° (SAE) optional
Photometer	2 x class L photometer according to DIN 5032 Part 6 and CIE publ. no. 69 (1987)
Apertures	adapted to room angle compliant measurement
Measuring range	1 mcd/lux to 10 kcd/lux, further ranges on request

Features and technical data

Alignment laser	
Height-adjustable measuring table for easy positioning of the specimen	
Small space requirement of the compact testing system, starting at 4 m x 1 m x 1.8 m (L x W x H)	
Power supply 230 V/50 Hz	
No darkroom required; can be moved on rollers	

Standards

Testing according to the following standards:	
ECE R 3, R 27, R 69, R 70, R 104 (Automotive)	DIN EN 12899-3 (Delineator posts and retroreflector)
SAE J 594, J 774, J 943, J 2041 (Automotive)	DIN 67520 (Retro-reflecting materials)
CIE Publication No. 54.2-2001 (Retroreflection)	EN 471 (High-visibility protective clothing)