RR-1.0 & RR-5.0

Reflex Reflector Measurement Systems

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Part 1. Introduction.

Our company, Photometric Solutions International (PSI), is a manufacturer of quality photometric and colorimetric equipment. Including our former incarnation as Optical & Photometric Technology (OPT), we have been servicing the lighting industries for 30 years. During this time we have earned an outstanding reputation for our attention to detail in our customer service, and our Flexibility, Reliability and Affordability.

- We have close associations with National and International Test Agencies for laboratory accreditation.
- Our staff stay at the forefront of photometric technology through our involvement in international organisations such as the CIE. Our company Technical Director Tony Bergen is President of CIE Australia and Secretary of CIE Division 2; and our CEO Dr Steve Jenkins is also on the CIE Australia Committee. Both also serve on many international CIE Technical Committees and for other standardization organisations.
- We have dedicated service teams based throughout the world who can service our equipment and provide calibration services.
- We have our own accredited public testing laboratory, which means that our staff are actively involved in testing and measurement on a daily basis and thus are very familiar with all aspects of the equipment operation.

Part 1. RR-1.0 & RR-5.0 Reflex Reflector Measurement Systems.

We will supply a reflex reflector measurement system as follows:

- Projector with power supply to provide a beam approximating CIE Illuminant A (2856 K CCT);
- Chopper to synchronise the measurement with phase-locking software routine to provide noise and stray light immunity;
- Cabinet to hold the power supply and amplifiers;
- Either a frame to hold the detector(s) with fixed positions for 0.20°, 0.33° and 1.50° for the standard ECE or SAE positions; or a motorised linear actuator (see detector options below);
- Communications cables;
- Software to interface the system and the goniometer:
    - Testing to the standard regulations;
    - Software has ability to edit the regulations and enter in new testing routines for R&D work;
    - Joystick window for arbitrary movement of the goniometer and measuring the CIL at different angles;
    - Monitor window to observe projector stability;
    - Report generator to print reports with ability to customise company logo and address.
- Installation and training is included.

Typical RR systems are shown in Figure 1 below.

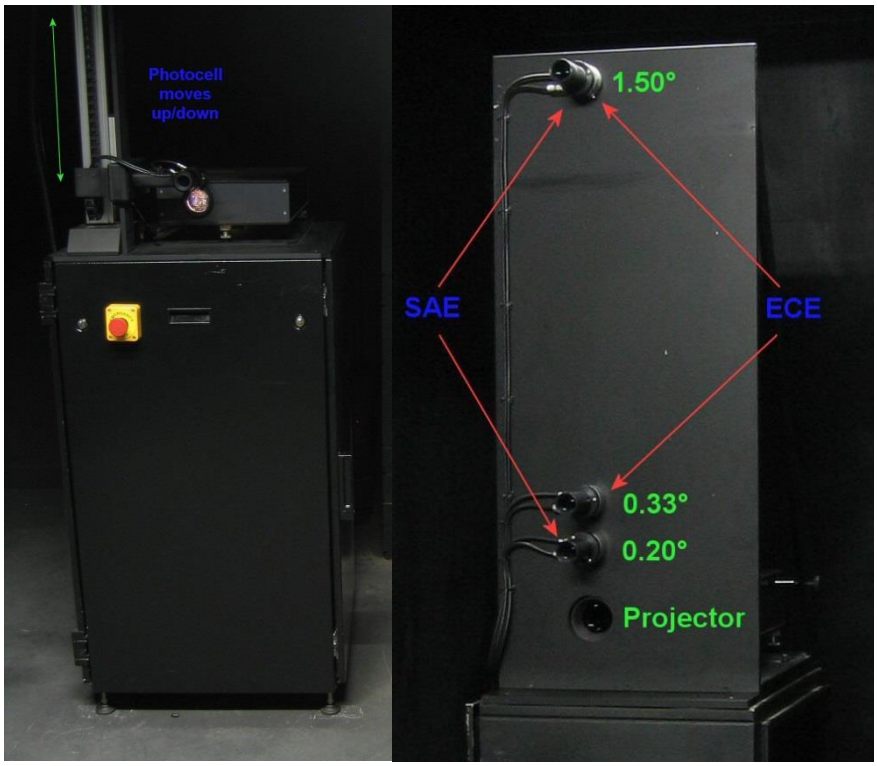

Figure 1: RR-1.0 Reflex Reflector Measurement System with linear actuator (left) and fixed photocell positions (right)

Photometer Arrangement

There are four options for arrangement of the photometer(s):

- A single photometer on a motorised linear actuator to move the detector to the required angle between 0.18° and 2.00° as shown in Figure 1 (left) above.
- Three photometers in the three standard positions shown in Figure 1 (right);
- Two photometers which can be positioned in either the ECE or the SAE standard positions shown in Figure 1 (right) so that any one test can automatically test all of an ECE test or an SAE test and the operator can change the photometer between ECE (0.33°) and SAE (0.20°) between tests;
- A single photometer which can be moved manually to the required position on the frame as shown in Figure 1 (right), where the operator needs to move the photometer as instructed by the software.