

LEOI-36 Apparatus of Silicon Photocell Characterization

- *Compact and vertical structure with low stray light impact*
- *Brightness adjustable Tungsten lamp*
- *4 photocells (monosilicon and polysilicon)*
- *Pitch angle adjustable for different illumination angle of light*

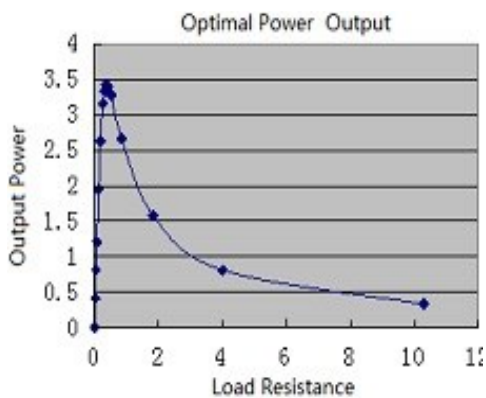


This experimental system is designed to help understand the fundamental characteristics and primary parameters of a Silicon photocell. Students are required to design and build optical and electrical configurations to conduct various experiments so that their hands-on skills can be enhanced. This system can be used to conduct the following experiments with Silicon photocells:

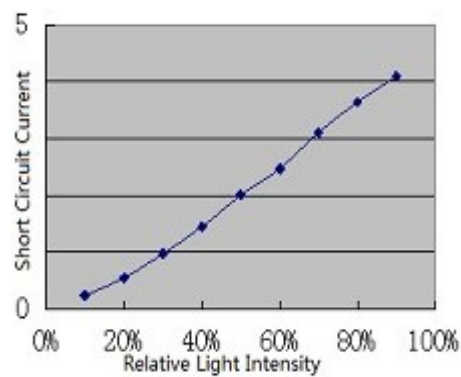
1. Short-circuit current, open-circuit voltage, max output power, optimal load and fill factor under light illumination.
2. V-I characterization of photocells in the absence of light illumination with bias voltage applied.
3. Short-circuit current versus open-circuit voltage of photocells under different light intensities.
4. Open-circuit voltage versus short-circuit current of photocells under different illumination angles.
5. Serial and parallel characteristics of photocells.

Part List

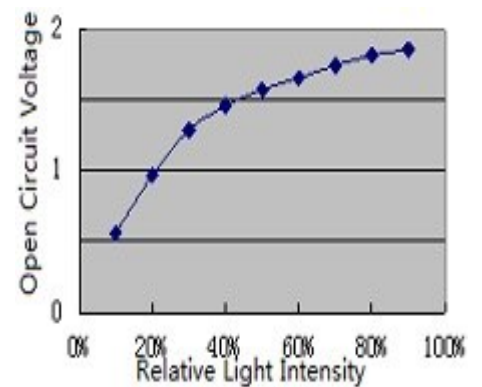
Photocell platform	1
Photocell	4
60 cm wire	2
30 cm wire	2
60 W bulb	2
Electric controller	1
Light shield plate	1
Instructional manual	1



Output power vs load resistance



Light intensity vs short circuit current



Light intensity vs open circuit voltage

Note: above product information is subject to change without notice.