

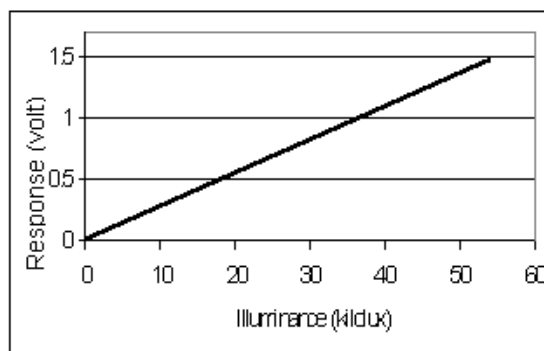
## Lux sensor

14.12.10

Ae 2872.51

This sensor has been specifically designed for the measurement of illuminance, i.e. the visual perception of light intensity. A teflon diffuser insures uniform illumination of the optical detector which adheres closely to the international standard CIE graph of average human eye sensitivity. Thus this detector can be used with a variety of different types of light sources and provide correct readings directly in lux (lumen/m<sup>2</sup>).

Sensor response is linear with illuminance so that an output of 5 volts corresponds to about 125 klux. Each sensor has been calibrated against a standard reference instrument, and actual calibration data is provided with each instrument.



*Typical response of luxsensor*

### Read out:

The sensor can be used with a wide variety of interfaces and multimeters. It can be connected directly to Pasco's Science Workshop or by means of an adapter (3885.20) to Multilog or via adapter (P-CI6686) to Texas Instruments' CBL interface. The sensor can also be connected via a battery box (2515.60) to any standard multimeter for read out in volts.

### Technical data:

Dimensions: Height 50 mm, diameter 60 mm  
Aperture size: 10 mm diameter with good cosine response  
Supply voltage: +5 VDC  
Output signal: 0-5 VDC  
Calibration: 5 V corresponds to 125 klux (see exact calibration)

### Test-values:

Voltage			
Lux			

### Connections:

- 1: Signal
- 2: Signal ground
- 3: NC
- 4: +5 VDC supply voltage
- 5: Supply voltage ground