

PMA 2133 LUMINANCE PROBE

SENSORS
INDUSTRIAL LIGHT
MEASUREMENT
LABORATORY LIGHT
MEASUREMENT

Delivery on all products is
Stock to 2 weeks.

Every product is
calibrated to NIST
traceable standards
before shipment.



The PMA 2133 luminance probe measures luminance according to photopic luminous efficiency curve.

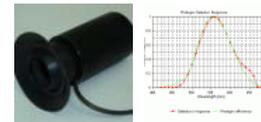
The PMA 2133 Luminance Probe is a portable luminance detector with spectral response following the CIE photopic action spectrum. This detector is designed to have a spectral response like that of the human eye's visual response in the photopic region.

The photopic spectral luminous efficiency curve peaks at 555nm and it is normalized to 1 at that wavelength. Luminance is the luminous intensity per unit area projected in a given direction. The standard unit for luminance is cd/m^2 (candela per square meter, sometimes referred to as nit). Another common unit of luminance is fL (footlambert) where $1 \text{ fL} = 3.426 \text{ cd/m}^2$. Luminance is essentially the amount of visible light leaving a point on a surface in a particular direction. The light that leaves the surface can be due to emission, reflection, or transmission.

Uses

The PMA2133 measures luminance and is used in the electronics industry to QC Cathode Ray Tubes and Monitors

Alternate Views



Applications

Quality control of CRTs

Inspection of monitors

Features

High sensitivity
Wide dynamic range
Excellent long-term stability

Cosine corrected
NIST traceable calibration

Specifications

Spectral response

Follows CIE photopic spectral luminous efficiency curve (400-700nm) Figure 1

Field of View

13°

Range

0 - 6,800 cd/m^2 0 - 2,000 fL

Display resolution

0.01 cd/m^2 or 0.01 fL

Operating environment

32 to 120 °F (0 to +50 °C)

Cable

5'.(1.5 m)

Viewing Diameter

0.45" (11.4 mm)

Diameter

1.6" (40.6 mm)

Height

3.2" (81.3 mm)

Weight

3.9 oz. (110 grams)

