PMA 2121 BLUE LIGHT SAFETY SENSOR

SENSORS
INDUSTRIAL LIGHT MEASUREMENT
INDUSTRIAL PROCESS SENSING AND OEM PRODUCTS
LABORATORY LIGHT MEASUREMENT

Delivery on all products is Stock to 2 weeks.

Every product is calibrated to NIST traceable standards before shipment.

The PMA 2121 blue light safety sensor offers an accurate, easy, inexpensive way to measure the blue light radiation hazard to eyes for a wide range of occupations. Such exposure, according to numerous medical studies, can inflict permanent and irreversible damage to the eye causing visual field defects and visual impairment.
The PMA2121 Blue Light Safety detector indicates the effective irradiance weighted with the American Conference of Governmental Industrial Hygienists (ACGIH) Spectral Weighting Function for blue light hazard. Light sources that may produce a blue light hazard include: monochromatic and collimated lasers as well as collimated arc, or tungsten lamps (e.g. search lamps). Flash lamps generally do not present serious hazard because of the limited energy of the flash as compared to continuous sources.

To protect against retinal photochemical injury from chronic blue-light, the max. exposure limit for a source subtending less than 0.011 radian should not exceed 10mJ/cm^2 per 10,000 seconds of exposure (approx. 2 hours 47 minutes). For exposure periods greater than 10,000 seconds the weighted irradiance should not exceed 1µW/cm^2.

Uses

Employers, safety officers and risk managers can use this detector to protect workers against the effects of excessive daily blue light exposure.

Alternate Views

Applications

Industrial and laboratory safety
Welding stations
Printing
UV curing and photolithography
Lighting
Safety glass testing
Environmental testing

Features

High sensitivity
Dynamic range 2*105
Excellent long term stability
Cosine corrected
NIST traceable calibration
Ease of use

Specifications

Spectral response Follows ACGIH blue hazard action spectrum

Figure 1
Angular response

5% for angles <60°
Range

2,000 µW/cm2, 20,000 mW/cm2
Display resolution

0.01 µW/cm2, 0.1 mW/m2
Operating environment

32 to 120 °F (0 to +50 °C) no precipitation
Cable

5ft (1.5m)
Diameter

1.6" (40.6 mm)
Height

1.8" (45.8 mm)
Weight

7.1 oz. (200 grams)

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