

XD-45-HB

<https://www.gigahertz-optik.com/es-es/producto/xd-45-hb-2/>

Etiquetas del producto:



Descripción

The XD-45-HB-4 irradiance detector is specially designed for the evaluation of Blue light exposure hazard values for artificial light sources. The four sensor design of this unique device covers the requirements for eye risk assessment. It supports a number of standards and regulations:

- IEC 62471:2006 and EN 62471:2008
- 2006/25/EC
- IEC TR 62778:2014

Three Sensor B(λ) Design

The Blue Light Hazard spectral responsivity for eye risk evaluation is formed by three filtered sensors for the BLUE_{UA300-400}, BLUE₄₀₀₋₆₀₀ and BLUERED₆₀₀₋₇₀₀ spectral ranges. The IEC/EN 62471 conformal B(λ) detector is useful for evaluation of any type light source that contains UV-A and deep red light content.

Additional Illuminance Sensor

An extra V(λ) photometric sensor for illuminance measurement in lx is installed to establish the 500 lx reference distance protocol for illuminance and/or radiance qualification. All four filtered sensors are mounted behind a 20 mm diameter cosine diffuser.

Traceable Calibration

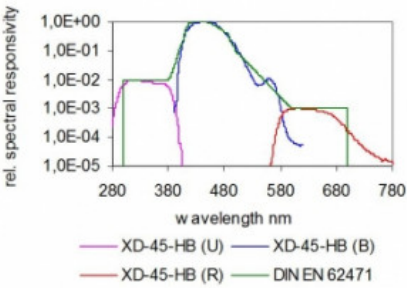
Calibration of the B(λ) (W/m²) and E_v (lx) detector responsivity is performed by the Gigahertz-Optik GmbH calibration laboratory for optical radiation measurements quantities. As with all light detectors supplied by Gigahertz-Optik calibration of absolute detector responsivity as well as detector individual measured relative spectral responsivity data is included.

Steradian Tube for Radiance

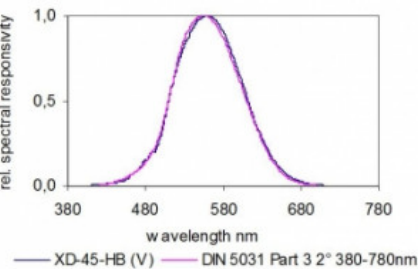
The optional XD-45-HB-SRT200 steradian tube is a unique tool for product qualification measurements of blue light hazard at the recommended distance of 200 mm. The tube attaches to the front of the XD-45-HB detector head and includes two exchangeable aperture plates to form a 100 mrad (20 mm diameter) and 11 mrad (2.2 mm diameter) field of view as stated in IEC 62471:2006 and EN 62471:2008 limit values. The tube is made out of light weight plastic with internal baffles and low reflection coating to reduce side wall stray light traversing down the barrel. The XD-45-HB-SRT200 steradian tube is an optionally available detector accessory component. No extra calibration is required.

Recommended Optometers

For applications involving steady state light the X1-3 optometer is recommended. For unstable or short event light the optometer P-9801 should be selected.



XD-45-HB B(λ) 3-sensor detector - typ. spectral responsivity



XD-45-HB V(λ) Detector - typ. spectral responsivity

Especificaciones

General	
General	B(λ) detector useful for evaluation of any type light source that contains UV-A and red light components. Set-up with three photodiodes with optical filter correction forming the actinic BLUE _{UA300-400} , BLUE ₄₀₀₋₆₀₀ and BLUE _{RED600-700} spectral sensitivity conform to IEC 62471:2006 and EN 62471:2008. Fourth detector with V(λ) photometric sensitivity for the measurement of illuminance in lx.
Especificación	
Campo de visión	20 mm diameter diffuser, 11 mrad and 100 mrad with front adapter XD-45-HB-SRT200
Rango de medición	B(λ) (Σ of all 3 cells): effective irradiance 0.02 mW/m² to 100 W/m² (max. resolution 2 μW/m²)
Rango de respuesta de la irradiancia espectral	B(λ) (300 - 400) nm: effective irradiance 2 μW/m² to 100 W/m² (max. resolution 0.2 μW/m²)
	B(λ) (400 - 600) nm: effective irradiance 20 μW/m² to 1000 W/m² (max. resolution 2 μW/m²)
	B(λ) (600 - 700) nm: effective irradiance 0.05 μW/m² to 2 W/m² (max. resolution 0.005 μW/m²)
Rango de medición de la iluminancia (medición integral)	V(λ): Illuminance 0.2 lx to 1,000,000 lx (max. resolution 0,02 lx)

Miscelánea	
Dimensiones	45 mm diameter, 30 mm high
Peso	200 g
Nota	Specifications stated for X1-3 meter including detector *) The maximum measureable signal value may be limited by heat radiated by the source under test
Cable de conexión	cable length 2 m, with ITT (-4) connector for the usage with X1-3

Configurable con

Nombre del producto	Imagen del producto	Descripción	Ir al producto
X1-3		Optometer for the measurement of UV and Blue-light hazard of artificial radiation source.	https://www.gigahertz-optik.com/es-es/producto/x1-3/

Información de compra

Número de artículo	Modelo	Descripción
Producto		
15298011	XD-45-HB-4	Detector head, protective cap, calibration certificate
Calibración		
15300580	K-Si-SR	Calibration of relative spectral responsivity from 250 nm to 1100 nm
15300577	K-FOV	Calibration of cosine field of view function
15311981	KP-XD45HBX1-E-I	Option: DIN EN ISO/IEC 17025:2018 Test Certificate (DAkks). Integral irradiance in the wavelength range from 300nm to 700nm and illuminance. In combination with X1 optometer.
Recalibración		
15300460	K-XD45HB-I	Re-calibration of irradiance responsivity with calibration certificate
15311980	KKP-XD45HBX1-E-I	Factory Calibration Certificate with DIN EN ISO/IEC 17025:2018 Test Certificate. In combination with X1 optometer.
Opciones		
15298007	XD-45-HB-SRT200	Front tube with 2.2 mm and 20 mm aperture adapter
15298008	XD-45-HB-SRT200-2.2	Adapter with 2.2 mm aperture
15298009	XD-45-HB-SRT200-20	Adapter with 20 mm aperture

Número de artículo	Modelo	Descripción
15309267	XD-45-HB-SRT200-AI	Front Adapter with exchangeable 2.2 mm (11 mrad) and 20 mm (100 mrad) apertures. Tube manufactured of aluminum including black inner coating. Suitable for higher temperatures at measurement location.

Contacto, calibración, servicio y asistencia

Somos conocidos en todo el mundo por nuestro excelente asesoramiento técnico y asistencia posventa. Póngase en contacto con nosotros para encontrar juntos la mejor solución para usted. Nuestros servicios:

- Asesoramiento técnico y ventas
- Soporte posventa
- Calibraciones y recalibraciones (servicios de calibración ISO/IEC 17025, calibración en fábrica, calibración de productos de terceros)
- Reparaciones y actualizaciones
- Consultoría OEM y de viabilidad de soluciones personalizadas

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