

BN-LDSF-2P

<http://www.gigahertz-optik.de/en-us/product/BN-LDSF-2P>

Product tags:



Description

Calibration standard lamp as reference standard for spectral radiant flux

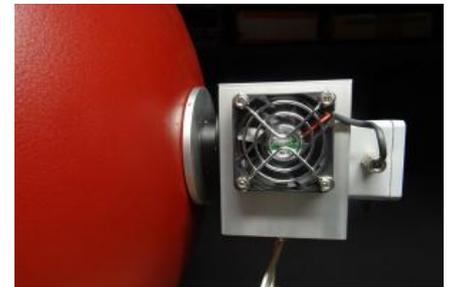
One of the common measures of optical radiation is total radiant flux (or total radiant power). This measure measures the total flux of a light source in W. For the calibration of measurement devices (spectroradiometers) of spectral radiant flux in W/nm, calibrated light sources are required. These must ideally have within the spectral responsivity range of the instrument to be calibrated, a continuous spectral distribution and a traceable to a National Metrology Institute (NMI) calibration. In addition, the lamps used must meet high requirements with regard to their short-term and long-term stability. The most commonly used halogen lamps, however, provide too little signal in the UV range, which is why deuterium lamps are often used there. These provide a usable calibration range from 200 nm to 400 nm.



Deuterium calibration standard for the UV range in 2Pi geometry

Reference standard BN-LDSF-2P

The reference standard BN-LDSF-2P is based on a 30 W deuterium lamp integrated in a housing with a diffuser to calibrate an integrating sphere in 2Pi geometry in spectral radiant power (for example for the precise measurement of UV LEDs). The electrical connection is made via laboratory sockets. The 1.0HL mechanical connection allows a precise and reproducible connection of the BN-LDSF-2P to an integrating sphere.



BN-LDSF-2P on integrating sphere mounted (1.0HL port)

Each lamp is subjected to a recorded burn-in process before being released. Only lamps that meet the strict burn-in criteria will be released.

Traceable calibration

The calibration of the spectral radiant flux by the Calibration Laboratory for Optical Radiation Measurements of Gigahertz-Optik GmbH is traceable to common National Metrology Institutes (NMI) such as the Physikalisch Technische Bundesanstalt (PTB).

Special lamp power supply LPS-D-30

Deuterium lamps require a special power supply for operation. The LPS-D-30 is suitable for the BN-LDSF-2P.

Specifications

General

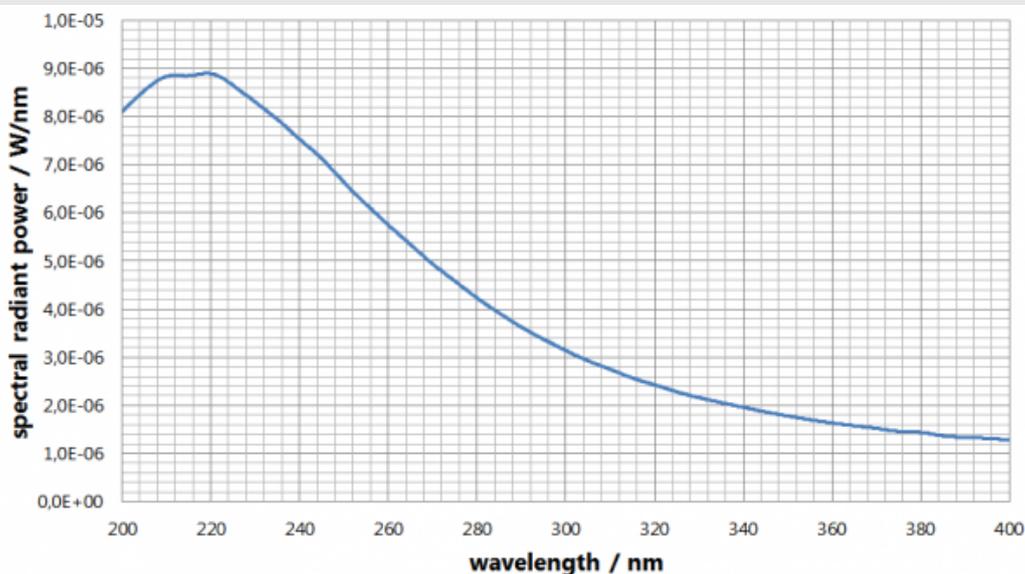
Short description

Calibration standard lamp for use as a reference standard of spectral radiant power in the UV range

Main features	30 W Deuterium lamp. 2Pi directional characteristic.
Measurement range	200 nm to 400 nm
typical applications	Calibration of the spectral radiant power of spectroradiometers in the UV on integrating spheres.
Calibration	Spectral radiant power in 2Pi from 200 nm to 400 nm

Product

spectral radiant power



Mounting

1.0 HL

Calibration

Radiation characteristics

2Pi

Purchasing information

Article-Nr	Modell	Description
Product		
15307523	BN-LDSF-2P	BN-LDSF-2P lamp. Including protective cap and stoving certificate. Calibration optional. Requires the provision or purchase of a power supply for operation and a carry case for the lamp.
Calibration		
15309836	K-LDSF2P-Phi-S-V01	Calibration of the spectral radiant power (W/nm) of a BN-LDSF-2P calibration lamp. Wavelength range 200 nm - 400 nm.
Accessories		
15305716	LPS-D-30	LPS-D-30 Lamp Power Supply