LIGHT SOURCE

CALIBRATED LAMP LIGHT SOURCE SERIES

L7810, L7810-02 (Xenon Lamp)
L7820, L7820-02 (Deuterium Lamp)

Easy to reproduce highly stable light!!



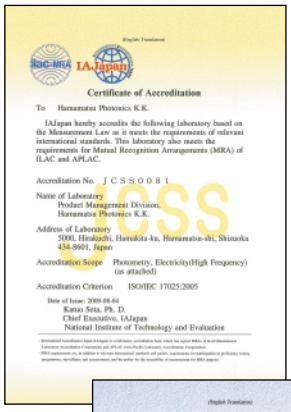
Left: Lamp Housing
Right: Power Supply

TLSOF0151



Left: Lamp Housing
Right: Power Supply

TLSOF0159


Certificate of Accreditation

To Hamamatsu Photonics K.K.

IAJapan hereby accredits the following laboratory based on the Measurement Law as it meets the requirements of relevant international standards. This laboratory also meets the requirements for Mutual Recognition Arrangements (MRA) of ILAC and APLAC.

Accreditation No. JCSS0081

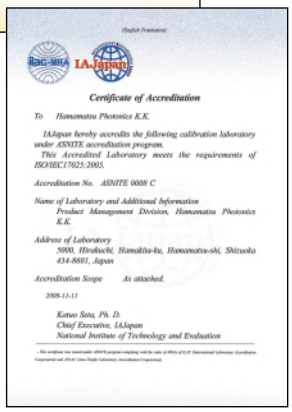
Name of Laboratory
Product Management Division,
Hamamatsu Photonics K.K.

Address of Laboratory
5000, Hirakuchi, Hamakita-ku, Hamamatsu-shi, Shizuoka
434-8601, Japan

Accreditation Scope Photometry, Electricity(High Frequency)
(as attached)

Accreditation Criterion ISO/IEC 17025:2005

Date of Issue: 2009-04-04
Katuo Seta, Ph. D.
Chief Executive, IAJapan
National Institute of Technology and Evaluation


Certificate of Accreditation

To Hamamatsu Photonics K.K.

IAJapan hereby accredits the following calibration laboratory under ASNITE accreditation program.
This Accredited Laboratory meets the requirements of ISO/IEC17025:2005.

Accreditation No. ASNITE 0008 C

Name of Laboratory and Additional Information
Product Management Division, Hamamatsu Photonics K.K.

Address of Laboratory
5000, Hirakuchi, Hamakita-ku, Hamamatsu-shi, Shizuoka
434-8601, Japan

Accreditation Scope As attached.

2008-11-11

Katuo Seta, Ph. D.
Chief Executive, IAJapan
National Institute of Technology and Evaluation

These light sources deliver the extremely high levels of "stability" and "repeatability" essential to calibrated light sources. These are available as an optimal set including a lamp, lamp housing and power supply, so that anyone can easily reproduce a highly stable light output.
The L7810-02 xenon lamp light source is calibrated over a wide spectral range from 200 nm to 800 nm, while the L7820-02 deuterium lamp light source is calibrated in the UV range from 200 nm to 400 nm.
Since we are certified as an ASNITE-Calibration laboratory, we are capable of calibrating spectral irradiance over a wide range from 200 nm to 800 nm (L7810-02).
The spectral range at wavelengths shorter than 250 nm is calibrated based on the ASNITE calibration system (Accreditation System of National Institute of Technology and Evaluation), while the spectral range at wavelengths longer than 250 nm is calibrated based on the JCSS (Japan Calibration Service System).
As of August 2009, Hamamatsu Photonics is the only company certified as an ASNITE-Calibration laboratory in the "Light" field.

Manufactured upon receiving your order.

APPLICATIONS

- **Light level control of light source**
- **Sensitivity control of optical sensor**
- **Light intensity measurement and studies of photoreactions (Light resistance, light curing, etc.)**
- **Quality control of photometric equipment (Medical analysis equipment, semiconductor inspection systems, imaging devices, etc)**

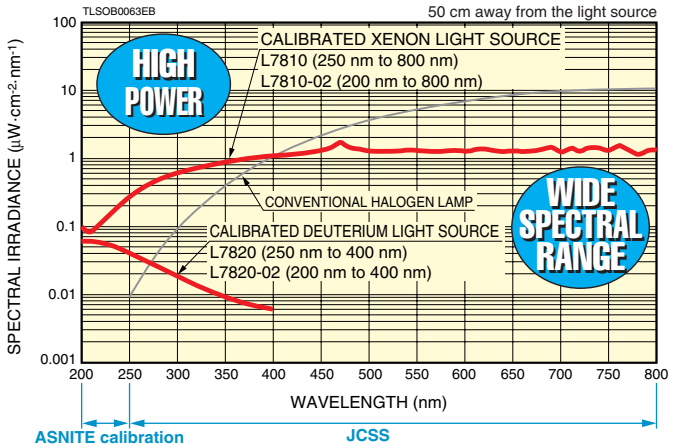
HAMAMATSU

SPECIFICATIONS

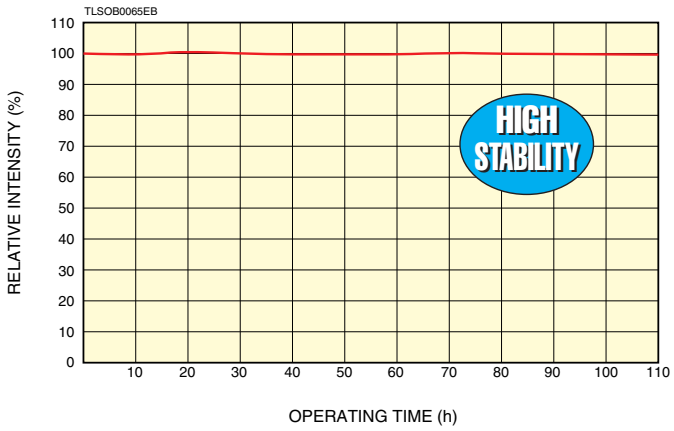
Type No.		L7810	L7810-02	L7820	L7820-02
Lamp		Xenon lamp		Deuterium lamp	
Input Wattage		150 W		30 W	
Spectral Distribution		185 nm to 2000 nm		185 nm to 400 nm	
Calibrated Range ①	ASNITE Calibration	—	200 nm to 245 nm (5 nm intervals)	—	200 nm to 245 nm (5 nm intervals)
	JCSS	250 nm to 800 nm (10 nm intervals)		250 nm to 400 nm (10 nm intervals)	
Type of Calibration		Spectral irradiance			
Calibration Unit		$\mu W \cdot cm^{-2} \cdot nm^{-1}$			
Output Window Material (Lamp Housing)		Synthetic quartz			
Output Window Diameter		ϕ28 mm		ϕ25 mm	
Optical Axis Height		140 mm (150 mm including plastic feet)			
Warm-up Time		10 minutes or more			
Timer		Hour display (power supply)		Hour display (lamp housing)	
Input Voltage (AC)		100 V to 240 V, 50 Hz / 60 Hz			
Power Consumption		350 VA		90 VA	
Cooling (Lamp Housing, Power Supply)		Forced air cooling			
Ambient Operating Temperature		0 °C to +40 °C			
Operating Range During Calibration	Temperature	+23 °C to +27 °C			
	Humidity	20 % to 70 % (no condensation)			
Dimensions (excluding projecting parts) (W × H × D)	Lamp Housing	100 mm × 280 mm × 100 mm			
	Power Supply	144 mm × 90 mm × 282 mm		117 mm × 90 mm × 200 mm	
	Carrying Case ②	480 mm × 380 mm × 205 mm			
Weight	Lamp Housing	Approx. 2.9 kg		Approx. 2.2 kg	
	Power Supply	Approx. 3.2 kg		Approx. 2.2 kg	
	Total Weight ③	Approx. 11 kg		Approx. 9.5 kg	
Recalibration Interval ④		100 hours in operation			
Guaranteed Lamp Service Life ⑤		500 hours			

NOTE: ①Spectral irradiance is measured at a point 50 cm away from the reference plane of the lamp housing.
②Carrying case specially designed to contain one set of calibrated lamp light source and accessories.
③Total weight including a set of calibration lamp light source and carrying case.
④This is a general guide for recalibration to maintain calibration reliability. Please contact our sales office for recalibration fee.
⑤This is the total amount of time that the lamp can be recalibrated to serve as a calibrated light source.

COMPARISON OF SPECTRAL IRRADIANCE (Reference Data)



LIGHT INTENSITY DRIFT (Typ.)



This is the logo mark for the Accreditation System of National Institute of Technology and Evaluation (ASNITE), an independent administrative agency in Japan. NITE independently implements calibration standards based on international standards.

In spectral regions not covered by the range specified by JCSS, NITE carries out accreditation to make calibration using international and foreign national standards. The Product Management Dept. of Hamamatsu Photonics K. K. was accredited as an ASNITE calibration company in the "Light" field on May 7, 2004 and is entitled to issue calibration certificates bearing the ASNITE logo mark (ASNITE accreditation symbol).

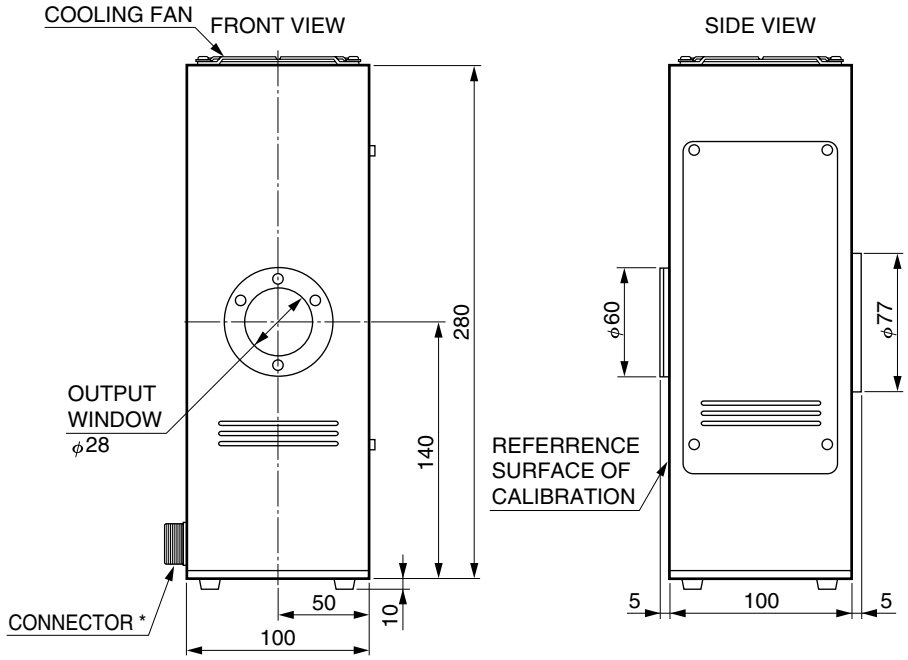
This is the logo mark for the traceability system approved by the Japan Calibration Service System (JCSS) based on the Measurement Law.

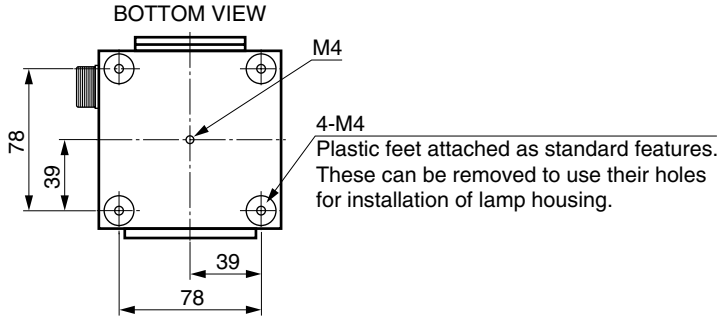
The Product Management Dept. of Hamamatsu Photonics K. K. was accredited as a calibration company in the "Light" field on May 21, 1999, and then became a registered company on August 4, 2009 according to the legal revisions. And is entitled to issue calibration certificates bearing the JCSS logo mark (JCSS accreditation symbol). Those calibration certificates assure the traceability to National Measurement Standards and can be used, for example, as a traceability certificate for ISO9000 series.

DIMENSIONAL OUTLINES (Unit: mm)

L7810, L7810-02 (Xenon Lamp)

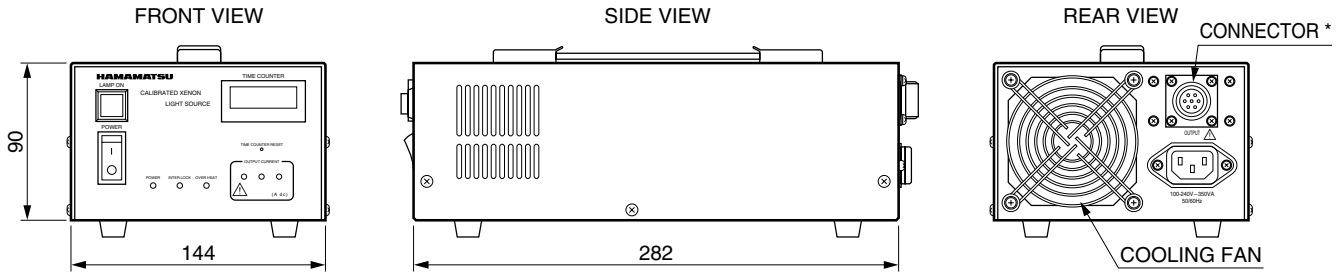
LAMP HOUSING





TLSOA0066EC

POWER SUPPLY



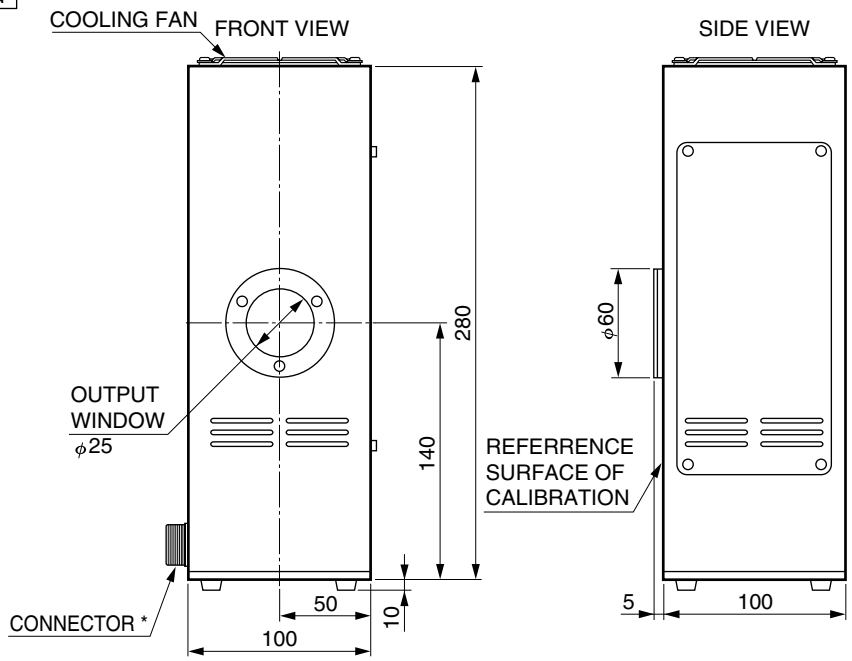
* For cable to connect lamp housing with power supply, length: 2 m

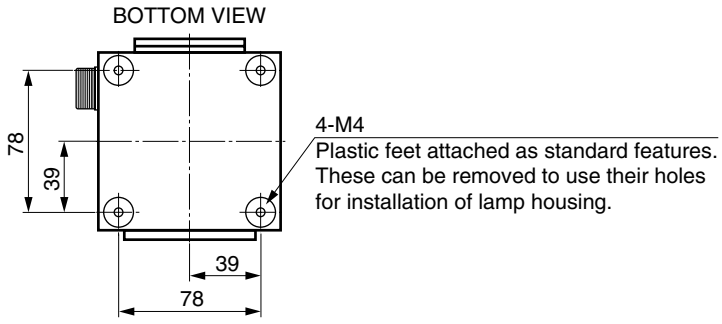
TLSOA0090EB

DIMENSIONAL OUTLINES (Unit: mm)

L7820, L7820-02 (Deuterium Lamp)

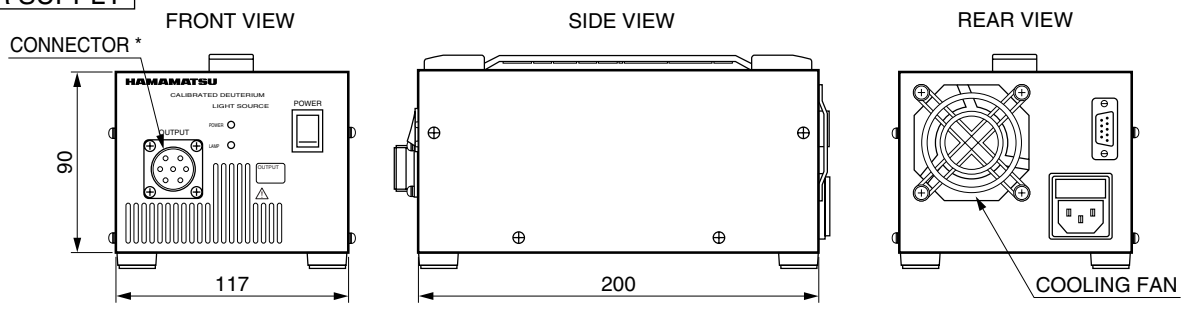
LAMP HOUSING





TLSOA0072ED

POWER SUPPLY



* For cable to connect lamp housing with power supply, length: 1.8 m

TLSOA0091EB

WARRANTY	This device is guaranteed for one year after delivery date from us. The warranty extends only to replacement of the products. The warranty dose not cover damage due to misuse of natural calamity.

Subject to local technical requirements and regulations, availability of products included in this promotional material may vary. Please consult with our sales office.
Information furnished by HAMAMATSU is believed to be reliable. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications are subject to change without notice. No patent rights are granted to any of the circuits described herein. ©2009 Hamamatsu Photonics K.K.

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OCT. 2009 IP