



中国认可  
国际互认  
校准  
CALIBRATION  
CNAS L0502

# 校准证书

Calibration Certificate

证书编号 GXfs2020-04263  
Certificate No.

|                             |   |
|-----------------------------|---|
| 客户名称<br>Client              | 力汕电子科技（上海）有限公司<br>LISUN ELECTRONICS (SHANGHAI) CO., LTD                                   |
| 器具名称<br>Instrument          | 紫外辐射照度计<br>UV Irradiance Meter  |
| 型号/规格<br>Type/Model         | UV-B-254  |
| 出厂编号<br>Serial No.          | B2008037  |
| 生产厂商<br>Manufacturer        | 北京师范大学光电仪器厂<br>BEIJING NORMAL UNIVERSITY PHOTOELECTRIC INSTRUMENT FACTORY                 |
| 联络信息<br>Contact Information | 上海市嘉定区沪宜公路 1101 号 1 幢 113 室<br>ROOM 113-1, NO. 1101, HUYI ROAD, JIDING DISTRICT, SHANGHAI |
| 校准日期<br>Date of Calibration | 2020-12-28  |
| 接收日期<br>Date of Receiving   | 2020-12-28  |

批准人：代彩虹

Approved by

发布日期：2021 年 1 月 25 日

Date of Issue



地址：中国北京北三环东路 18 号  
Address: No.18 Bei San Huan Dong Lu, Beijing, P.R. China

电话：+86-10-64525569/74  
Tel

网址：http://www.nim.ac.cn  
Website

邮编：100029  
Post Code

传真：+86-10-64271948  
Fax

电子邮箱：kehufuwu@nim.ac.cn  
Email

# 中国计量科学研究院



证书编号 GXfs2020-04263

Certificate No.

| <p>中国计量科学研究院（NIM）是国家最高的计量科学研究中心和国家级法定计量技术机构。1999 年授权签署了国际计量委员会（CIPM）《国家计量基(标)准和国家计量院签发的校准与测量证书互认协议》（CIPM MRA）。The National Institute of Metrology (NIM) is China's national metrology institute (NMI) and a state-level legal metrology institute. NIM is China's signatory to the Mutual Recognition of National Measurement Standards and of Calibration and Measurement Certificates Issued by National Metrology Institutes (CIPM MRA) which is arranged by the International Committee of Weights and Measures (CIPM).</p> <p>质量管理体系符合 ISO/IEC17025 标准，通过中国合格评定国家认可委员会（CNAS）和亚太计量规划组织（APMP）联合评审的校准和测量能力（CMCs）在国际计量局（BIPM）关键比对数据库中公布。NIM's quality management system meets requirements of the ISO/IEC 17025. Its Calibration and Measurement Capabilities (CMCs) that are peer reviewed both by China National Accreditation Service for Conformity Assessment (CNAS) and the Asia Pacific Metrology Programme (APMP) are published in the International Bureau of Weights and Measures (BIPM) Key Comparison Database (KCDB).</p> <p>2011 年，NIM 和 CNAS 就认可领域的技术评价活动签署了谅解备忘录，承认 NIM 的计量支撑作用和出具的校准/检测结果的溯源效力。NIM and CNAS signed a Memorandum of Understanding (MOU) for Recognition of Technical Assessment in Laboratory Accreditation Field in 2011, in which CNAS recognizing the technical supporting role of NIM in laboratory accreditation and the traceability of NIM's calibration / test results.</p> <p>校准结果不确定度的评估和表述均符合 JJF1059 系列标准的要求。The evaluation and expression of uncertainty of the calibration results are in line with the requirements of JJF1059 series standards.</p> |   |  |                         |                                    |
|--|---|--|-------------------------|------------------------------------|
| <p>校准所依据的技术文件（代号、名称）Reference documents (Code,Name)<br/>                 参照 JJG 879—2015 紫外辐射照度计检定规程<br/>                 Verification Regulation of Ultraviolet Irradiance Meters, JJG 879-2015</p>   |   |  |                         |                                    |
| <p>校准环境条件及地点 Calibration place and environment<br/>                 温度 Temperature: (24.0±1.0) °C 地点 Location: 和-13-108 Room 108, Building 13<br/>                 湿度 Humidity: (31±2) % RH 其它 Others: 暗室 Dark room</p>  |   |  |                         |                                    |
| <p>校准使用的计量基（标）准装置(含标准物质)/主要仪器<br/>                 Reference Standards (Including the Reference Material) / Instruments used</p>   |   |  |                         |                                    |
| 名称<br>Name   | 测量范围<br>Measurement Range               | 不确定度/<br>准确度等级<br>Uncertainty/Accuracy | 证书编号<br>Certificate No. | 证书有效期至<br>Due Date<br>(YYYY-MM-DD) |
| 工作基准紫外<br>辐射照度计<br>Working<br>Standard<br>Ultraviolet<br>Radiometer  | UVA <sub>1</sub> ;UV365;<br>UV310;UV254 | $U_{rel}=(4.0-5.0)\% (k=2)$            | GXfs2020-04171          | 2021-12-20                         |

## 校准结果 Calibration Results

| 标准值<br>Standard Value<br>( $\mu\text{W}/\text{cm}^2$ ) | 显示值<br>Display Value<br>( $\mu\text{W}/\text{cm}^2$ ) | 修正因子<br>Correction factor |
|--|---|---------------------------|
| 51.2   | 46.0  | 1.11                      |
| 84.8   | 76.2  | 1.11                      |
| 125.0  | 112.2   | 1.11                      |
| 162.0  | 146.0   | 1.11                      |

说明: Notes

1. 修正因子=标准值/显示值

Correction factor= Standard Value / Display Value

2. 波长: UV-254 波段: 峰值波长  $\lambda_p=254 \text{ nm} \pm 2 \text{ nm}$ , 峰值半高宽度  $\Delta\lambda \leq 10 \text{ nm}$

Peak Wavelength:  $\lambda_p=254 \text{ nm} \pm 2 \text{ nm}$ ,  $\Delta\lambda \leq 10 \text{ nm}$

3. 校准用光源: 低压汞灯

Calibration Source: Low Pressure Mercury Lamp

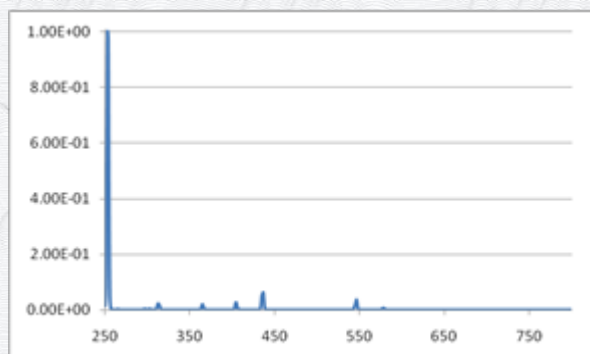


图 1. 低压汞灯的相对光谱功率分布/ Fig 1. The relative spectral distribution of Low Pressure Mercury Lamp



证书编号 GXfs2020-04263  
Certificate No.

# 校准结果

## Calibration Results

4. 校准结果的不确定度:  $U_{rel}=13\%(k=2)$

The uncertainty of calibration results:  $U_{rel}=13\%(k=2)$

注意: 受被测仪器自身性能的影响, 证书中的修正因子仅适用于测量与证书中的光谱类型相同的光源, 否则可能带来较大的测量误差。

Attention: The correction factor in the certificate can only be used when measuring the lamp with the same spectral distribution in figure 1.

-----以下空白-----  
(Bank below)

### 建议 Suggestion:

根据客户要求 and 校准规范 JJG 879-2015 的规定, 通常情况下 12 个月校准一次。

According to the client or the calibration specification JJG 879-2015, the recommended calibration cycle is 12 months.

### 声明 Statement:

1. 我院仅对加盖“中国计量科学研究院校准专用章”的完整证书负责。

NIM is ONLY responsible for the complete certificate with the calibration stamp of NIM.

2. 本证书的校准结果仅对所校准的计量器具有效。

The certificate is ONLY valid for the calibrated instrument.

3. 本证书用中英文两种语言表达, 准确含义以中文为准。

The certificate is reported in both English and Chinese, with the Chinese version as standard.

校准员: 王彦飞

Calibrated by

核验员: 吴志峰

Checked by