



校准证书

CALIBRATION CERTIFICATE

证书编号 WWD202502082
Certificate No.

第 1 页, 共 3 页
Page of

客户名称 优利德科技(中国)股份有限公司
Name of the Customer

联络信息 广东省东莞市松山湖园区工业北一路6号
Contact Information

计量器具名称 红光笔(光源)
Description

型号/规格 UT691A-30
Model/Type

制造厂 UNI-T
Manufacturer

出厂编号 1 设备管理编号 ——
Serial No. Equipment No.

接收日期 2025 年 06 月 25 日
Receipt on Y M D

结论 见校准结果
Conclusion Shown in the results of calibration

校准日期 2025 年 07 月 02 日
Calibration on Y M D

发布日期 2025 年 07 月 03 日
Issue on Y M D

批准 陈益胜
Authorized by

核验 林珂
Reviewed by

校准 张宏
Calibrated by

证书专用章
Stamp



扫一扫查真伪



说 明

证书编号 WWD202502082
Certificate No.

DIRECTIONS

第 2 页, 共 3 页
Page of

1. 本中心是国家市场监督管理总局在华南地区设立的国家法定计量检定机构, 本中心的质量管理体系符合 ISO/IEC 17025:2017 标准的要求。

This laboratory is the National Legal Metrological Verification Institution in southern China set up by the State Administration for Market Regulation. The quality system is in accordance with ISO/IEC 17025:2017.

2. 本中心所出具的数据均可溯源至国家计量基准和/或国际单位制(SI)。

All data issued by this laboratory are traceable to national primary standards and/or International System of Units (SI).

3. 校准地点、环境条件:

Location and environmental conditions of the calibration:

地点 无线电室 (Radio Lab.)

温度 (23~24) °C

相对湿度 40 %

Location

Temperature

R.H.

4. 本次校准的技术依据:

Reference documents for the calibration:

JJG 958-2000 光传输用稳定光源检定规程 V.R. of Stabilized Laser Sources for Optical Transmitt

5. 本次校准所使用的主要计量标准器具:

Major standards of measurement used in the calibration:

设备名称/型号规格/测量范围 Name of Equipment /Model/Type/Range	编号 Serial No.	证书号/有效期/溯源单位 Certificate No./Due Date /Traceability to	计量特性 Metrological Characteristic
光标准装置 Optical Standard Device /8163B/81624B/-90dBm~+10dBm	MY48206739/DE4 1101209	GXgf2024-06137 /2025-09-24 /国家计量院	光功率MPE: ± 0.09 dB MPE: ± 0.09 dB
光谱分析仪 Optical Spectrum Analyzer /MS9710C/(600~1750) nm	6200532787	WWD202403665 /2025-11-04 /本中心	波长: $U=0.06$ nm, 功率: 率: $U=0.2$ dB ($k=2$)

注: 1. 本证书校准结果只与受校准仪器有关。 The results relate only to the items calibrated.

Note: 2. 未经本机构书面批准, 不得部分复制此证书。 This certificate shall not be reproduced except in full, without the written approval of our laboratory.

3. “客户名称”、“联络信息”由委托方提供, “制造厂”、“型号规格”、“出厂编号”以及“设备编号”为仪器上标注, 委托方对上面内容如有异议, 须在收到证书后二十个工作日内提出。

The information Name of the Customer and Contact Information are provided by client, and the Manufacturer, Model/Type, Serial No. and Equipment No. are marked on the items. Client shall submit any objection within 20 working days after receiving the certificate for the information above.



校准结果 RESULTS OF CALIBRATION

证书编号 WWD202502082
Certificate No.

原始记录号 020252082
Record No.

第 3 页, 共 3 页
Page of

1 光源输出功率 (见表1)

Laser source output power (Shown in table 1)

表1 (table 1)

波长 Wavelength	实测值 Actual Value
650 nm	33.8 mW

2 光源中心波长 (见表2)

Laser source wavelength (Shown in table 2)

表2 (table 2)

波长标称值 Nominal Value (630~670) nm	实测值 Actual Value
	667.7 nm

说明:

Note:

1 测量结果的扩展不确定度:

Expanded uncertainty of measurement:

功率: $U=0.2$ dB

Power

波长: $U_{rel}=5\times 10^{-4}$

Wavelength

包含因子: $k=2$

Coverage Factor

本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度评定与表示》评定, 由合成标准不确定度乘以包含概率约为95%时对应的包含因子 k 得到。

The expanded uncertainty given in this certificate is evaluated according to JJF 1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", which is obtained by multiplying the combined standard uncertainty by the coverage factor k corresponding to the coverage probability of about 95%.

2 该仪器的溯源日期为本证书的“校准日期”, 由于复校时间间隔的长短是由仪器的使用情况、使用者、仪器本身质量等诸因素所决定的, 因此, 送校单位可根据实际使用情况自主决定复校时间间隔。更换重要部件、维修或对仪器性能有怀疑时, 应及时校准。

The traceability date of this instrument is the "Calibration Date" on this certificate, Since the calibration interval is determined by the use of the instrument, operation of the user, the quality of the instrument itself and other factors, the re-calibration date can be decided by the user according to the actual situation. In case of replacement of important parts, maintenance or doubt on the performance of the instrument, it shall be calibrated in time.

3 校准活动中对测量结果有影响的条件:

Conditions under which the calibrations were made that have an influence on the measurement results:

温度: 23 °C ~ 24 °C
Temperature

相对湿度: 40%
R.H.