



华南国家计量测试中心  
广东省计量科学研究所

SOUTH CHINA NATIONAL CENTER OF METROLOGY  
GUANGDONG INSTITUTE OF METROLOGY

检定证书

VERIFICATION CERTIFICATE

证书编号 CJC202119403  
Certificate No.

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委托方 优利德科技(中国)股份有限公司  
Client

委托方联络信息 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 涂层测厚仪  
Description

型号/规格 UT343E  
Model/Type

制造厂 UNI-T  
Manufacturer

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

接收日期 2021 年 11 月 10 日  
Date of Receipt Y M D

结论 B级合格  
Conclusion Qualified for Class B

检定日期 2021 年 11 月 22 日  
Date of Verification Y M D

依据检定规程, 被检仪器检定周期不超过 壹 年  
The verification period is 1 year(s)

批准人 张勇  
Approved Signatory

核 验 张嘉淇  
Reviewed by

检 定 吴家辉  
Verified by

检定专用章  
Stamp



扫一扫查真伪





## 说 明

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### DIRECTIONS

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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, 计量授权证书号是: (国) 法计 (2017) 01043号、(国) 法计 (2017) 01032号。本中心质量管理体系符合 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 under authorization certificates No.(2017)01043 & (2017)01032. 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. 检定地点、环境条件:

Place and environmental conditions of the verification:

地点 本中心精测实验室

Place (P. M. Lab.)

温度  $(20.0 \pm 1.0) ^\circ\text{C}$

Temperature

相对湿度  $(50 \pm 5) \%$

R.H.

4. 本次检定的技术依据:

Reference documents for the verification:

JJG 818-2018 磁性、电涡流式覆层厚度测量仪检定规程 V.R. of Magnetic and Eddy Current Measuring Instrument for Coating Thickness

5. 本次检定所使用的主要计量标准器具:

Major standards of measurement used in the verification:

设备名称/型号规格

Name of Equipment

/Model/Type

标准厚度片

Standard film foils

/(18.3~982.7)  $\mu\text{m}$

基体(测厚仪)

Thickness Gauge Base

/ $\Phi 50\text{ mm}$

编号

Serial No.

1030

9808A, 9808B,

9808C

证书号/有效期/溯源单位

Certificate No./Due Date

/Traceability to

CJC202106322

/2022-04-18

/本中心

CDP202100095

/2022-01-04

/本中心

计量特性

Metrological

Characteristic

B 级

Class B

允差:粗糙度: $\leq 0.2\text{ }\mu\text{m}$ ,平面

度: $\leq 1\text{ }\mu\text{m}$

MPE:  $Ra \leq 0.2$

$\mu\text{m}$ , Flatness  $\leq 1\text{ }\mu\text{m}$

注: 1. 本证书检定结果只与受检仪器有关。The results relate only to the items verified.

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. “委托方”、“委托方联络信息”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 Client 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.

4. 本次检定日期视为发布日期。The verification date is the date of issue of the certificate.





## 检定结果 RESULTS OF VERIFICATION

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1 外观及各部分相互作用: 符合要求

Appearance and functions: Pass

2 仪器示值见表1:

Indication shown in table 1 :

	表1(Table 1)					单位(Unit): $\mu\text{m}$
标准厚度/Standard thickness	18.3	104.3	485.1	982.7	2006.1	
铁基体探头/Indication of Fe probe	18.5	106	478	975	1996	
非铁基体探头/Indication of NFe probe	17.3	106	484	982	1966	

铁基体探头(Fe probe): 示值误差不超过:  $\pm(1+3\% H) \mu\text{m}$

非铁基体探头(NFe probe): 示值误差不超过:  $\pm(1+3\% H) \mu\text{m}$

Error of indication not exceed:

$H$  为标准厚度片的厚度值, 单位:  $\mu\text{m}$

$H$ : the thickness of standard foil, unit  $\mu\text{m}$

3 示值重复性:

检测厚度:  $485.1 \mu\text{m}$

Repeatability of indication:

Tested thickness

铁基体探头(Fe probe):  $1.0 \mu\text{m}$  [允差(MPE):  $(1+3\% H)/5 \mu\text{m}$ ]

非铁基体探头(NFe probe):  $1.0 \mu\text{m}$  [允差(MPE):  $(1+3\% H)/5 \mu\text{m}$ ]

说明:

Note:

1 铁基探头试验基底材料: 铁; 非铁基探头试验基底材料: 铝

Fe probe backing material: Ferrum; Nfe probe backing material: Aluminum.

2 仪器测量结果的扩展不确定度: 厚度不大于  $50 \mu\text{m}$ ,  $U=0.5 \mu\text{m}$ ; 厚度大于  $50 \mu\text{m}$ ,  $U=(0.5+0.8\% H) \mu\text{m}$ ,

$H$  为标准厚度片的厚度值, 单位:  $\mu\text{m}$  包含因子:  $k=2$ 。

The expanded uncertainty of measuring results:  $H \leq 50 \mu\text{m}$ ,  $U=0.5 \mu\text{m}$ ;  $H > 50 \mu\text{m}$ ,  $U=(0.5+0.8\% H) \mu\text{m}$ ,





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$H$  is the thickness of standard foil, unit  $\mu\text{m}$ , Coverage factor:  $k=2$ .

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%.

UNI-TREND

