

## 5.2 แสงในสำนักงาน

5.2.1 มีการตรวจวัดความเข้มของแสงสว่าง (โดยอุปกรณ์การตรวจวัด ความเข้มของแสงสว่างที่ได้มาตรฐาน) และดำเนินการแก้ไขตามที่มาตรฐานกำหนด

(2) เครื่องวัดความเข้มของแสงสว่าง จะต้องมีความมาตรฐานและได้รับการสอบเทียบ (แสดงหลักฐานใบรับรอง)





## INTERNATIONAL TESTING SERVICE CO., LTD

1213/388 Ladprao 94 Ladprao Rd. Wangtonglang Bangkok 10310  
Tel 0-2559-2095 Fax 0-2559-2096

E-mail : [sale@itest-lab.com](mailto:sale@itest-lab.com) web site : [www.itest-lab.com](http://www.itest-lab.com)



NSC-TISI-TIS 17025  
CALIBRATION 129

# CALIBRATION CERTIFICATE

Issued date: 27 September 2024

Client Name : **DEPARTMENT OF ENVIROMENTAL SCIENCE, FACULTY OF SCIENCE  
SILIPAKORN UNIVERSITY**

Address : 6 Rachamankha Nai Rd., Phra Pathom Chedi, Mueang, Nakorn Pathom 73000.

Request No: **C-2409 - 338**

Laboratory No.: **CAL- 338**

Date of Request: 27 September 2024.

Date of Calibration: 27 September 2024.

### 1. Unit Under Calibration (UUC) :

**Nomenclature** : Digital Light Meter

**Serial No.:** 220502588

**Maker** : TENMARS

**Model** : TM-209

**2. Place of Calibration:** Photometry Standard Laboratory, INTERNATIONAL TESTING SERVICE CO., LTD.

**3. Range of Calibration:** 1 Range

**4. Condition of Laboratory:** Ambient temperature:  $(25 \pm 2)$  °C and relative humidity  $(60 \pm 20)$  %.

**5. Reference Standard:** Standard Tungsten Halogen Lamp, Serial No.: 504011, which was calibrated on 22 April 2024, can be traceable to International System of Unit (SI) through National Institute of Metrology (Thailand), Certificate No.: TP-1014-24.

### 6. Support Equipment:

1. Photometric bench, 6.3 meter long.
2. DC. power supply, Serial No.: EJ 19A 009, Model: GPR-25H 300, Maker: GW INSTRUK.
3. Digital Multimeter, Model: 34401A, S/N: MY44011212 and MY44011215.
4. Foot Candle / Lux Meter, Model: 407026, S/N: Q 558437, Maker: EXTECH.

### 7. Calibration Procedure:

The measurement was done in accordance with WI-CP-01. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , providing a level of confidence of approximately 95 %.

The Results shown in this certification report refer only to the equipment(s) calibrated unless otherwise stated  
This Calibration Certificate cannot be reproduced, except in full, without permission of company



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CALIBRATION 128Request No: **C-2409 - 338**

Serial No.: 220502588

Laboratory No.: **CAL - 338****Results :**

UUC Range	Standard (Ix)	UUC Reading (Ix)		Correction (Ix)	Uncertainty of Measurement ( $\pm$ Ix)
		Before adjust	After adjust		
Auto	0.00	0.00	0.00	0.00	0.10
	99.9	93.0	100.1	-0.2	2.1 % of Reading
	499	462	497	+2	
	998	925	998	0	
	1496	1396	1500	-4	
	1993	1866	2007	-14	

- Note : 1. The results relate only to the items calibrated.  
2. Zero adjust before used.  
3. The UUC calibrated at L1(1.062).

Calibration result approved by

  
(Mr. Yuktana Tholueng)Approved on behalf of  
International Testing Service Co., Ltd  
(Mr. Jichit Vivat-Anant)  
Managing Director

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CALIBRATION 129

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Issued date: 27 September 2024

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Address : 6 Rachamankha Nai Rd., Phra Pathom Chedi, Mueang, Nakorn Pathom 73000.

Request No: **C-2409 - 339**

Laboratory No: **CAL- 339**

Date of Request: 27 September 2024.

Date of Calibration: 27 September 2024.

**1. Unit Under Calibration (UUC) :**

**Nomenclature :** Digital Light Meter

**Serial No.:** 220502595

**Maker :** TENMARS

**Model :** TM-209

**2. Place of Calibration:** Photometry Standard Laboratory, INTERNATIONAL TESTING SERVICE CO., LTD.

**3. Range of Calibration:** 1 Range

**4. Condition of Laboratory:** Ambient temperature:  $(25 \pm 2) ^\circ\text{C}$  and relative humidity  $(60 \pm 20) \%$ .

**5. Reference Standard:** Standard Tungsten Halogen Lamp, Serial No.: 504011, which was calibrated on 22 April 2024, can be traceable to International System of Unit (SI) through National Institute of Metrology (Thailand), Certificate No.: TP-1014-24.

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**7. Calibration Procedure:**

The measurement was done in accordance with WI-CP-01. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , providing a level of confidence of approximately 95 %.

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**Results :**

UUC Range	Standard (Ix)	UUC Reading (Ix)		Correction (Ix)	Uncertainty of Measurement ( $\pm$ Ix)
		Before adjust	After adjust		
Auto	0.00	0.00	0.00	0.00	0.10
	100.0	92.5	100.8	-0.8	2.1 % of Reading
	500	459	499	+1	
	999	922	1001	-2	
	1498	1389	1507	-9	
	1998	1862	2018	-20	

Note : 1. The results relate only to the items calibrated.  
2. Zero adjust before used.  
3. The UUC calibrated at L1(1.074).

Calibration result approved by

  
(Mr. Yuktana Tholueng)  
Approved on behalf of  
International Testing Service Co., Ltd  
(Mr. Pichit Vivat-Anant )  
Managing Director

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