

5.2 แสงในสำนักงาน

5.2.1 มีการตรวจวัดความเข้มของแสงสว่าง (โดยอุปกรณ์การตรวจวัด ความเข้มของแสงสว่างที่ได้มาตรฐาน) และดำเนินการแก้ไขตามที่มาตรฐานกำหนด

(2) เครื่องวัดความเข้มของแสงสว่าง จะต้องมีความมาตรฐานและได้รับการสอบเทียบ (แสดงหลักฐานใบรับรอง)

ฝ่ายหอสมุดฯ มีการตรวจวัดความเข้มของแสงสว่างประจำปี โดยมีภาควิชาวิทยาศาสตร์สิ่งแวดล้อม คณะวิทยาศาสตร์ มหาวิทยาลัยศิลปากร เป็นผู้ดำเนินการในการตรวจสอบ โดยเครื่องวัดความเข้มของแสงสว่าง มีความมาตรฐานและได้รับการสอบเทียบ ดังแนบ



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 web site : 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: $(25 \pm 2) ^\circ\text{C}$ 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.

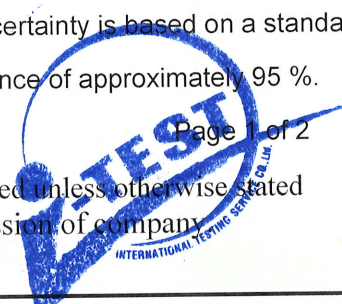
6. Support Equipment:

1. Photometric bench, 6.3 meter long.
2. DC. power supply, Serial No.: EJ 19A 009, Model: GPR-25H 300, Maker: GW INSTEK.
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



**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 web site : www.itest-lab.com



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

Serial No.: 220502588

Laboratory No.: **CAL – 338**

Results :

UUC Range	Standard (lx)	UUC Reading (lx)		Correction (lx)	Uncertainty of Measurement ($\pm$ lx)
		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. Yuttana Tholueng)



**Approved on behalf of
International Testing Service Co., Ltd**


(Mr. Pichit Vivat-Anant)
Managing Director



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 web site : 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 - 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.

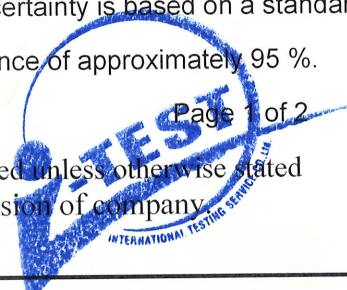
6. Support Equipment:

1. Photometric bench, 6.3 meter long.
2. DC. power supply, Serial No.: EJ 19A 009, Model: GPR-25H 300, Maker: GW INSTEK.
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



Page 1 of 2

**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 web site : www.itest-lab.comRequest No: **C-2409 - 339**

Serial No.: 220502595

Laboratory No.: **CAL – 339****Results :**

UUC Range	Standard (lx)	UUC Reading (lx)		Correction (lx)	Uncertainty of Measurement ($\pm$ lx)
		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. Yutana Tholueng)**Approved on behalf of
International Testing Service Co., Ltd**
(Mr. Pichit Vivat-Anant)
Managing Director