

Certificate No. 24PTP\_0104240241

Page 1 of 3

## **Certificate of Calibration**

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP04493

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073862020

LOCATION : Patient Wards 406

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

670/1 Phaholyothin Road, Samsen Nai, Phaya Thai, Bangkok 10400

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 23 APRIL 2024 ISSUE DATE : 30 APRIL 2024

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Performed by: \_\_\_\_\_ Approved by:

USANEE CHALONGPHOKSILCHAI

PHUWASIN YIWKIM

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#### **CONDITION OF THIS RESULT OF TEST**

### 1. REFERENCE STANDARD INSTRUMENT:

MASTER MANUFACTURER MODEL SERIAL NO. CERTIFICATE NO. DUE DATE 7 Jun 2024 Vitalsign Simulator Fluke ProSim8 2541031 23MD777 ATC-140A 12 Jul 2024 Temperature Ametex 561460-00403 WB23062779

Calibrator (Source)

#### 2. THIS CERTIFICATION IS TRACEABLE TO:

- Technology Promotion Association (Thai-Japan)
- N-Health

# 3. THIS RESULT OF TEST WAS FOUND ACCURATE AS SHOW ON DATE AND PLACE OF TEST ONLY



Certificate No. 24PTP\_0104240241

Page 2 of 3

# **Calibration Report**

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ID CODE : PTP04493

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073862020

DATE OF CALIBRATION : 23 APRIL 2024

ENVIRONMENT : TEMPERATURE 25 °C

RELATIVE HUMIDITY 55 %

#### PROCEDURE USED:

This instrument was calibration by comparison with standard

### **MEASURMENT RESULT:**

/	Without Adjustment		Before Adjustment		After Adjustment
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Systolic				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)
60	61.00	1.00	1.67	± 0.9238
120	117.00	-3.00	-2.50	± 1.2702
200	201.00	1.00	0.50	± 1.7321

Diastolic					
Standard Setting	UUC* Reading	Error	% Error	Uncertainty	
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)	
30	35.00	5.00	16.67	± 0.7506	
80	80.00	0.00	0.00	± 1.0393	
150	147.00	-3.00	-2.00	± 1.4434	

Heart Rate				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(BPM)	(BPM)	(BPM)	(%)	(BPM)
60	60.00	0.00	0.00	± 0.0150
80	80.00	0.00	0.00	± 0.0460
120	120.00	0.00	0.00	± 0.0460

FI-BME-NHS-CP-007/1 Rev.03 Page 2/3 Issued Date 20/07/2023



Certificate No. 24PTP\_0104240241

Page 3 of 3

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EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

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%Spo2				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(%SPO <sub>2</sub> )	(%SPO <sub>2</sub> )	(%SPO <sub>2</sub> )	(%)	(%SPO <sub>2</sub> )
90	90.00	0.00	0.00	± 0.1039
96	96.00	0.00	0.00	± 0.1109
100	100.00	0.00	0.00	± 0.1155

Temperature				
UUC* Setting	Standard Reading	Error	% Error	Uncertainty
(°C)	(°C)	(°C)	(%)	(°C)
35	35.10	0.10	0.29	± 0.3100
37	36.90	-0.10	-0.27	± 0.3100
39	38.90	-0.10	-0.26	± 0.3100

### **UUC\*: Unit Under Calibration**

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

FI-BME-NHS-CP-007/1 Rev.03 Page 3/3 Issued Date 20/07/2023