

Certificate No. 24PTP_0104240224

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Certificate of Calibration

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP03787

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073752020

LOCATION : Patient Wards 18

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 22 APRIL 2024 ISSUE DATE : 30 APRIL 2024

	Usanee
Performed by:	

USANEE CHALONGPHOKSILCHAI

__ Approved by :

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



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Calibration Report

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP03787

MANUFACTURER : WELCH ALLYN

MODEL : CONNEX SPOT MONITOR

SERIAL No. : 100073752020

DATE OF CALIBRATION : 22 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	119.00	-1.00	-0.83	± 1.2702
200	204.00	4.00	2.00	± 1.7321

Diastolic				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)
30	36.00	6.00	20.00	± 0.7506
80	79.00	-1.00	-1.25	± 1.0393
150	145.00	-5.00	-3.33	± 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	



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%Spo2				
Standard Setting	UUC* Reading	Error	% Error	Uncertainty
(%SPO ₂)	(%SPO ₂)	(%SPO ₂)	(%)	(%SPO ₂)
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	34.90	-0.10	-0.29	± 0.3100
37	37.00	0.00	0.00	± 0.3100
39	39.10	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