

Certificate No.

24PTP_0104240369

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Certificate of Calibration

EQUIPMENT : EXERCISERS, AEROBIC, TREADMILL

ID CODE : PTP00994

MANUFACTURER : QUINTON

MODEL : Q-STRESS TM55

SERIAL No. : QS006616

LOCATION : Heart Center

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 25 APRIL 2024

ISSUE DATE : 3 MAY 2024

Kanittha.

Performed by : KANITTHA SRIPRAPAD

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 Digital Tachometer **PLT200** 1837601 23E1911 7 Jun 2024 Monarch

2. THIS CERTIFICATION IS TRACEABLE TO:

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

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



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Calibration Report

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MANUFACTURER : QUINTON

MODEL : Q-STRESS TM55

SERIAL No. : QS006616

DATE OF CALIBRATION : 25 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	63.50	3.50	5.83	± 1.5520		
120	122.00	2.00	1.67	± 1.2702		
200	202.00	2.00	1.00	± 1.7321		

Diastolic						
Standard Setting	UUC* Reading	Error	% Error	Uncertainty		
(mmHg)	(mmHg)	(mmHg)	(%)	(mmHg)		
30	34.25	4.25	14.17	± 0.9425		
80	84.00	4.00	5.00	± 1.0393		
150	155.50	5.50	3.67	± 1.5546		

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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Gain						
Standard Setting	UUC* Reading	Error	% Error	Uncertainty		
(mm/mV)	(mm/mV)	(mm/mV)	(%)	(mm/mV)		
5	5.00	0.00	0.00	± 0.0577		
10	10.00	0.00	0.00	± 0.0577		
20	20.00	0.00	0.00	± 0.0577		

Amplitude					
Standard Setting	UUC* Reading	Error	% Error	Uncertainty	
(mV)	(mV)	(mV)	(%)	(mV)	
1	1.00	0.00	0.00	± 0.0042	
2	2.00	0.00	0.00	± 0.0042	

Paper Speed						
Standard Setting	UUC* Reading	Error	% Error	Uncertainty		
(mm/sec)	(mm/sec)	(mm/sec)	(%)	(mm/sec)		
25	25.00	0.00	0.00	± 0.2887		
50	50.00	0.00	0.00	± 0.5774		

Speed					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(MPH)	(MPH)	(MPH)	(%)	(MPH)	
5	5.07	0.07	1.34	± 0.0042	
9.6	9.65	0.05	0.52	± 0.0453	

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%

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