

Certificate No. 24PTP_0104240162

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Certificate of Calibration

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP00265

MANUFACTURER : PURITAN BENNETT

MODEL: 840

SERIAL No. : 3510103598

LOCATION : I.C.U

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 19 APRIL 2024

ISSUE DATE : 3 MAY 2024

Supatcha INDE

Performed by : Approved by : PHUWASIN YIWKIM

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CONDITION OF THIS RESULT OF TEST

1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEGas Flow AnalyzerFluke BiomedicalVT650606972523MD115827 Aug 2024

2. THIS CERTIFICATION IS TRACEABLE TO:

- 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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SERIAL No. : 3510103598

DATE OF CALIBRATION : 19 APRIL 2024

ENVIRONMENT : TEMPERATURE 24 °C

RELATIVE HUMIDITY 56 %

PROCEDURE USED:

This instrument was calibration by comparison with standard

MEASURMENT RESULT:

/	Without Adjustment		Before Adjustment		After Adjustment
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TIDAL VOLUME					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(mL)	(mL)	(mL)	(%)	(mL)	
400	406.13	6.13	1.53	± 14.4154	
600	609.28	9.27	1.55	± 21.7894	
800	807.90	7.90	0.99	± 28.9036	

BREATH RATE						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(BPM)	(BPM)	(BPM)	(%)	(BPM)		
30	30.00	0.00	0.00	± 0.3464		
20	20.00	0.00	0.00	± 0.2309		
15	15.00	0.00	0.00	± 0.1732		

I:E RATIO						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
((1:x))	((1:x))	((1:x))	(%)	((1:x))		
1	1.00	0.00	0.00	± 0.0231		
2	1.99	-0.01	-0.50	± 0.0462		
3	2.99	-0.01	-0.42	± 0.0695		

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PIP						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(cmH ₂ O)	(cmH ₂ O)	(cmH ₂ O)	(%)	(cmH ₂ O)		
20	19.77	-0.23	-1.15	± 0.3200		
30	29.27	-0.73	-2.43	± 0.3200		
40	39.08	-0.92	-2.30	± 0.3200		

PEEP						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(cmH2O)	(cmH2O)	(cmH2O)	(%)	(cmH2O)		
5	4.90	-0.10	-2.00	± 0.0577		
10	9.95	-0.05	-0.50	± 0.1155		
15	16.04	1.04	6.93	± 0.1732		

% OXYGEN						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(%O ₂)	(%O ₂)	$(\%O_2)$	(%)	(%O ₂)		
21	22.40	1.40	6.67	± 0.4850		
60	61.80	1.80	3.00	± 1.3857		
100	99.70	-0.30	-0.30	± 2.3095		

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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