

Certificate No.

24PTP_0104240308

Page 1 of 3

Certificate of Calibration

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP03465

MANUFACTURER : PURITAN BENNETT

MODEL: 840

SERIAL No. : 3121125670

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 : 25 APRIL 2024

ISSUE DATE : 3 MAY 2024

Supatcha

Performed by : Approved by : SUPATCHA BUAPUEAN

2101

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



Certificate No. 24PTP_0104240308

Page 2 of 3

Calibration Report

EQUIPMENT : VENTILATORS, INTENSIVE CARE

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MODEL: 840

SERIAL No. : 3121125670

DATE OF CALIBRATION : 25 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	407.40	7.40	1.85	± 14.5490		
600	603.88	3.88	0.65	± 21.7548		
800	805.48	5.48	0.68	± 28.9111		

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	-0.33	± 0.0693		

FI-BME-NHS-CP-018/1 Rev.03 Page 2/3 Issued Date 20/07/2023



Certificate No. 24PTP_0104240308

Page 3 of 3

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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	19.82	-0.18	-0.90	± 0.3200		
30	29.10	-0.90	-3.00	± 0.3200		
40	38.83	-1.17	-2.93	± 0.3200		

PEEP						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(cmH2O)	(cmH2O)	(cmH2O)	(%)	(cmH2O)		
5	5.01	0.01	0.20	± 0.0577		
10	9.78	-0.22	-2.20	± 0.1155		
15	14.78	-0.22	-1.48	± 0.1733		

% OXYGEN						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(%O ₂)	(%O ₂)	$(\%O_2)$	(%)	(%O ₂)		
21	22.10	1.10	5.24	± 0.4850		
60	61.90	1.90	3.17	± 1.3857		
100	99.10	-0.90	-0.90	± 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%

FI-BME-NHS-CP-018/1 Rev.03 Page 3/3 Issued Date 20/07/2023