

Certificate No. 24PTP_0104240110

Page 1 of 3

Certificate of Calibration

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP00263

MANUFACTURER : PURITAN BENNETT

MODEL: 840

SERIAL No. : 3510070748

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 : 18 APRIL 2024

ISSUE DATE : 3 MAY 2024

Supatcha Inch

Performed by : Approved by : PHUWASIN YIWKIM

This certificate may not be reproduced except in full unless permission for reproduction has been obtained in writing from the calibration.

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_0104240110

Page 2 of 3

Calibration Report

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP00263

MANUFACTURER : PURITAN BENNETT

MODEL: 840

SERIAL No. : 3510070748

DATE OF CALIBRATION : 18 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
---	--------------------	--	-------------------	--	------------------

TIDAL VOLUME					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(mL)	(mL)	(mL)	(%)	(mL)	
400	388.45	-11.55	-2.89	± 14.4149	
600	573.48	-26.53	-4.42	± 21.7393	
800	764.43	-35.57	-4.45	± 28.9351	

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	2.98	-0.02	-0.67	± 0.0693	

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



Certificate No. 24PTP_0104240110

Page 3 of 3

Calibration Report

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP00263

SERIAL No. : 3510070748

PIP					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(cmH ₂ O)	(cmH ₂ O)	(cmH ₂ O)	(%)	(cmH ₂ O)	
20	19.14	-0.86	-4.30	± 0.3200	
30	28.67	-1.33	-4.43	± 0.3200	
40	38.28	-1.72	-4.30	± 0.3200	

PEEP					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(cmH2O)	(cmH2O)	(cmH2O)	(%)	(cmH2O)	
5	4.90	-0.10	-2.00	± 0.0577	
10	9.88	-0.12	-1.20	± 0.1155	
15	14.91	-0.09	-0.60	± 0.1732	

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