

Certificate No. 24PTP_0104240120

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Certificate of Calibration

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP02508

MANUFACTURER : CAREFUSION

MODEL : VELA

SERIAL No. : BFT01839

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
Approved by:

SUPATCHA BUAPUEAN PHUWASIN YIWKIM

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CONDITION OF THIS RESULT OF TEST

Performed by:

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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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
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TIDAL VOLUME					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(mL)	(mL)	(mL)	(%)	(mL)	
400	384.08	-15.93	-3.98	± 14.4848	
600	604.38	4.38	0.73	± 21.7576	
800	807.58	7.58	0.95	± 29.0824	

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	1.97	-0.03	-1.50	± 0.0462	
3	2.87	-0.13	-4.33	± 0.0693	

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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	19.34	-0.66	-3.30	± 0.3200		
30	29.10	-0.90	-3.00	± 0.3200		
40	39.07	-0.93	-2.33	± 0.3200		

PEEP					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(cmH2O)	(cmH2O)	(cmH2O)	(%)	(cmH2O)	
5	5.17	0.17	3.40	± 0.0577	
10	9.69	-0.31	-3.10	± 0.1155	
15	14.83	-0.17	-1.13	± 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%

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