

Certificate No. 2

24PTP\_0104240129

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### **Certificate of Calibration**

EQUIPMENT : VENTILATORS, INTENSIVE CARE

ID CODE : PTP00278

MANUFACTURER : CAREFUSION

MODEL : VELA

SERIAL No. : BFT02553

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	386.80	-13.20	-3.30	± 14.4035	
600	624.50	24.50	4.08	± 21.7158	
800	844.43	44.43	5.55	± 28.9618	

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	2.00	0.00	0.00	± 0.0462		
3	2.99	-0.01	-0.33	± 0.0693		

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ID CODE : PTP00278 SERIAL No. : BFT02553

PIP						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(cmH <sub>2</sub> O)	(cmH <sub>2</sub> O)	(cmH <sub>2</sub> O)	(%)	(cmH <sub>2</sub> O)		
20	20.11	0.11	0.55	± 0.3200		
30	28.82	-1.18	-3.93	± 0.3200		
40	38.59	-1.41	-3.52	± 0.3200		

PEEP					
UUC* Setting	Standard Reading	Error	% Error	Uncertainty	
(cmH2O)	(cmH2O)	(cmH2O)	(%)	(cmH2O)	
5	5.40	0.40	8.00	± 0.0577	
10	10.50	0.50	5.00	± 0.1155	
15	15.48	0.48	3.20	± 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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