

*Certificate No.* 24PTP\_0104240256

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### **Certificate of Calibration**

EQUIPMENT : INJECTORS, CONTRAST MEDIA

ID CODE : PTP01840

MANUFACTURER : MEDRAD

MODEL : STELLANT

SERIAL No. : 3014426 38017

LOCATION : X-Ray

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

CALIBRATED DATE : 23 APRIL 2024

ISSUE DATE : 3 MAY 2024

Kanittha. Approved by:

KANITTHA SRIPRAPAD PHUWASIN YIWKIM

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### **CONDITION OF THIS RESULT OF TEST**

#### 1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEWEIGHT SCALEShinkoAJ-620E21100408823-09131410 Aug 2024

 $FOR\ INJECTOR \quad Denshi(VIBRA)$ 

Performed by:

Stop watch FBT JS-7065 - 23E1912 7 Jun 2024

#### 2. THIS CERTIFICATION IS TRACEABLE TO:

- ASIA MEDICAL AND AGRICULTURAL LABORATORY AND RESEARCH CENTER CO.,LTD
- 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 : 23 APRIL 2024

ENVIRONMENT : TEMPERATURE 25 °C

RELATIVE HUMIDITY 55 %

### **PROCEDURE USED:**

This instrument was calibration by comparison with standard

### **MEASURMENT RESULT:**

/	Without Adjustment		Before Adjustment		After Adjustment
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Delivered Volume and Flow Rate Accuracy						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(ml)	(ml)	(ml)	(%)	(ml)		
50	49.67	-0.33	-0.66	± 0.0010		
100	99.20	-0.80	-0.80	± 0.0010		
150	148.94	-1.06	-0.71	± 0.0010		

Time						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(sec.)	(sec.)	(sec.)	(%)	(sec.)		
20	20.00	0.00	0.00	± 0.2309		
25	25.00	0.00	0.00	± 0.2887		
30	30.00	0.00	0.00	± 0.3464		

Delivered Volume and Flow Rate Accuracy						
UUC* Setting	Standard Reading	Error	% Error	Uncertainty		
(ml)	(ml)	(ml)	(%)	(ml)		
50	49.72	-0.28	-0.56	± 0.0010		
100	98.69	-1.31	-1.31	± 0.0010		
150	150.05	0.05	0.03	± 0.0010		

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30	30.00	0.00	0.00	± 0.3464		

**Note:** Test: VOLUME 50 ml FLOW RAT 2.5 ml/sec Test: VOLUME 100 ml FLOW RAT 4 ml/sec Test: VOLUME 150 ml FLOW RAT 5 ml/sec

### **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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