

Report No. 24PTP\_01PM04240368

Page 1 of 3

# **Preventive Maintenance Action Report**

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP01094

MANUFACTURER : PHILIPS

MODEL : SURESIGNS VM4

SERIAL No. : US90328541

LOCATION : Gastrointestinal & Liver Center

KANITTHA SRIPRAPAD

SUBMITTED BY : PHYATHAI PHAHOLYOTHIN HOSPITAL

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

Tel: 02-271-7000 Fax: -

PM. DATE : 26 APRIL 2024

ISSUE DATE : 3 MAY 2024

Performed by:

Approved by:

PHUWASIN YIWKIM

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

1. REFERENCE STANDARD INSTRUMENT:

MASTERMANUFACTURERMODELSERIAL NO.CERTIFICATE NO.DUE DATEElectrical SafetyFlukeESA615349403423MD7747 Jun 2024

Analyzer

#### 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



Report No. 24PTP\_01PM04240368

Page 2 of 3

## **Preventive Maintenance Action Report**

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP01094

SERIAL No. : US90328541

### 1. Qualitative Tests

No.	List	Pass	Fail	None	Comment
1	Chassis/Housing	/			
2	Mount/Fasteners	/			
3	Casters/Brakes	/			
4	AC Plug	/			
5	Line Cord	/			
6	Strain Reliefs	/			
7	Fan	/			
8	Controls/Switches	/			
9	Battery/Charger	/			
10	Self-Test	/			
11	Time/Date Settings	/			
12	Cybersecurity			/	
13	Recorder / Printer			/	
14	Labeling	/			
15	Manuals	/			
16	Cables	/			
17	Tubes/Hoses/Bulbs	/			
18	Fittings/Connectors	/			
19	Indicators/Displays	/			
20	User Calibration	/			
21	Alarms	/			
22	Pressure Modes (IBP)			/	
23	Accessories	/			

## 2. Quantitative Tests

No.	List	Pass	Fail	None	Comment
1	Grounding Resistance $\leq 0.5 \Omega$	/			$0.264~\Omega$
2	Chassis Leakage Current ≤500 µA	/			83.6 μΑ
3	Lead -to-Ground Leakage Current ≤100 μA			/	
	grounded; ≤500 μA ungrounded				
4	Rate Calibration (ECG) ±2% or mfr	/			
5	Rate Alarm (ECG)	/			
6	Paper Speed ±2%			/	



Report No. 24PTP\_01PM04240368

Page 3 of 3

## **Preventive Maintenance Action Report**

EQUIPMENT : MONITORS, PHYSIOLOGIC, VITAL SIGNS

ID CODE : PTP01094 SERIAL No. : US90328541

### 2. Quantitative Tests (Continues)

No.	List	Pass	Fail	None	Comment
7	Air Leakage (NIBP) ≤15 mm Hg/min	/			
8	Static Pressure Accuracy (NIBP) ±3 mm Hg	/			
	*Oscillometric Pressure Accuracy (NIBP) ±8 mm				
	Hg				
9	Maximum Pressure (NIBP) ≤330 mm Hg	/			
10	Pressure Accuracy (IBP) ±2% *or mfr spec			/	
11	Alarm Accuracy (IBP) ±2%			/	
12	Temperature Accuracy, Predictive Mode			/	
	(thermistor thermometers) (Temp) ±0.3°C (0.5°F)				
13	Temperature Accuracy, Steady-State Mode			/	
	(thermistor thermometers) (Temp) ±0.3°C (0.5°F)				
14	Temperature Alarms (Temp) ±0.6°C (1.0°F)			/	
15	Carbon Dioxide Concentration Accuracy			/	
	(Capnometers) ±0.4 vol% (±3 mm Hg) or ±10%				

### 3. Preventive Maintenance

No.	List	Pass	Fail	None	Comment
1	Clean the exterior and accessories	/			
2	Lubricate			/	
3	Adjust			/	
4	Replace			/	

## 4. Remark ไม่มีสาย EKG, หน้าจอเป็นเส้น

Electrical Safety Test: Master used Electrical Safety Analyzer (Metron / QA-90) according to IEC.60601.1