

6.3.3 การบำรุงรักษาเครื่องมือทางการแพทย์ ต้องครอบคลุมการทดสอบหรือสอบเทียบประสิทธิภาพการทำงาน การทดสอบความปลอดภัยทางไฟฟ้า การทดสอบทางกายภาพภายนอกและฟังก์ชันการทำงาน และการบำรุงรักษาตามรอบเวลาเป็นอย่างน้อย

**CPM MEDICAL SUPPORT CO.,LTD.**  
203 Moo 3, Ban Khlong Subdistrict, Mueang Phitsanulok District Phitsanulok Province 65000 Tel. 081 195 3087

CERTIFICATE No. : CAL1224 MLH033  
Page 1 of 3

### Certificate of Calibration

EQUIPMENT : Blood Pressure Digital  
ID CODE : BPD-BLT-01  
MANUFACTURER : MEDEL  
MODEL : MODEL ELITE  
SERIAL No. : 2917000153  
LOCATION : BLT : ห้องวินิจฉัย  
CLIENT : MAELAO HOSPITAL  
309 Phahonyothin Road, Chom Mok Kaew Subdistrict, Mae Lao District, Chiang Rai Province 57250

CALIBRATED DATE : 17-Dec-2024  
ISSUE DATE : 17-Dec-2025  
ENVIRONMENT : TEMPERATURE 25 °C RELATIVE HUMIDITY 60 %

Performed by : MR.WONGSAKORN CHEASING  
Approved by : MR.CHAIWUT CHOMPUPETH  
CPM MEDICAL SUPPORT CO., LTD.

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CONDITION OF THIS RESULT OF TEST

1. REFERENCE STANDARD INSTRUMENT:

MASTER	MANUFACTURER	MODEL	SERIAL No.	CERTIFICATE NO.	DUE DATE
NIBP Simulator	BC Biomedical	NIBP-1030	73SA1021D	RA-2406009-6	14-Jun-25

2. THIS CERTIFICATION IS TRACEABLE TO : Through Advantage center co.,ltd.  
3. THIS RESULT OF TEST WAS FOUND ACCURATE AS SHOW ON DATE AND PLACE OF TEST ONLY

BPD-CPM-013 3 ม.ค. 2567 15 ม.ค. 2567 (DCC) 1/3

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Page 2 of 3

### Result of Calibration

#### Systolic Accuracy : mmHg ( ± 5 mmHg )

UUC* Setting (mmHg)	Standard Reading (mmHg)	Error (mmHg)	% Error (%)	Uncertainty (mmHg)
80.0	79.67	-0.33	-0.42	± 0.348
120.0	121.00	1.00	0.83	± 0.147
190.0	189.33	-0.67	-0.35	± 0.300

#### Diastolic Accuracy : mmHg ( ± 5 mmHg )

UUC* Setting (mmHg)	Standard Reading (mmHg)	Error (mmHg)	% Error (%)	Uncertainty (mmHg)
40.0	39.33	-0.67	-1.67	± 0.364
80.0	78.67	-1.33	-1.67	± 0.348
120.0	119.67	-0.33	-0.28	± 0.334

#### Rate Accuracy : bpm ( ± 2 bpm or 5 % )

UUC* Setting (bpm)	Standard Reading (bpm)	Error (bpm)	% Error (%)	Uncertainty (bpm)
80.0	80.00	0.00	0.00	± 0.147

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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### Preventive Maintenance Report

Page 3 of 3

EQUIPMENT : Blood Pressure Digital  
MANUFACTURER : MEDEL  
MODEL : MODEL ELITE  
SERIAL No. : 2917000153  
CLIENT : MAELAO HOSPITAL

ID CODE : BPD-BLT-01  
PM No. : PM1224 MLH025  
PM Date : 17-Dec-2024  
PM By. : MR.WONGSAKORN CHEASING

1. Qualitative Tests	Result	Comment
1.1 Chassis / Housing	Pass	
1.2 Mount	Pass	
1.3 Ac Plug / Receptacles	N/A	
1.4 Line Cord	N/A	
1.5 Strain Reliefs	N/A	
1.6 Circuit Breaker / Fuse	N/A	
1.7 Fittings / Connectors	N/A	
1.8 Controls / Switches	Pass	
1.9 Motor / Pump / Fan / Compressor	Pass	
1.10 Indicators / Displays	Pass	
1.11 Battery / Charger	Pass	
1.12 Tubes/Hoses/Bulbs (NIBP)	Pass	
1.13 Alarms	N/A	
1.14 User Calibration/Self-Test	Pass	
1.15 Labeling	Pass	
1.16 Accessories	N/A	
2. Quantitative Tests (Continues)	Result	Comment
2.1 Air Leakage ≤ 15 mmHg/min	Pass	
2.2 Static Pressure Accuracy ±3 mmHg or *Oscillometric Pressure ±8 mmHg	Pass	
2.3 Maximum Pressure (NIBP) ≤ 330 mmHg	Pass	
2.4 Rate Rate ± 10 %	Pass	
3. PREVENTIVE MAINTENANCE	Result	Comment
3.1 Clean the exterior and accessories	Pass	

Remark :

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