

CALIBRATION CERTIFICATE

Calibration of the **LIFOTRONIC-H9** (Fully Automated Hemoglobin Analyzer) has been carried out as per the recommendations of the principle company **SHENZHEN LIFOTRONIC TECHNOLOGY CO., LTD, China.**

Customer Name & Address: KRSNAA DIAGNOSTICS PVT LTD, Regional Hospital , Una – Hamirpur Road, Una , Himachal Pradesh – 174303.	Installation Date : 16.03.2023 Calibration Date : 16.03.2024 Calibration Due Date: 15.03.2025
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Instrument Serial No:	IA2B00001389
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Software Version Information:

System Version:	01.00.22-S
MCU1 Version:	01.00.02-H
MCU2 Version:	01.00.01-G

Monitoring Information:

Test Mode	96s-HbA1C
HP Pressure pump stepping Value	100
Column Temp	40
H9 Temp	39.8
N.P.	64
ADC 415	24848
ADC 500	17546
ADC	6188

INSTRUMENT CALIBRATION DATAS:

Global Data:

System Parameters:

2D Arm Parameters:

X-axis	Value
Rack Routine(50-200mm)	116
ST Routine(50-200mm)	148

Z-axis	Value
Blood Tube Routine(10-250mm)	115
Diluted Tube Routine(10-250mm)	46
Diluting Cup Routine(10-250mm)	200
Press Cap Routine(10-100mm)	50

Hardware Parameter Settings:

High Pressure Pump Stepping value	100
Distance from Rack Detector to 1 st Tube(0-50mm)	4
Distance Between 2 Consecutive Tubes(150-250mm)	196

Operation Parameters:

Test Mode	96s-HbA1C
Reagent Version	A1
HbA1C Area Ratio	100
Variant Ratio Limit	10

Elution Parameters:

Peaks	Start Time	End Time
HbA1a	7	14
HbA1b	14	18
HbF	18	23
LA1C	23	28
HbA1C	32	45
HbA0	50	90

Pressure Settings:

Parameters	Value
Pressure (Mpa) >	3
Pressure (Mpa) <	12
HP Pump(PPS)	100

Flow cell Adjustment:

Parameters	Value
DAC_LED	1920
Gain 415	24848
Gain 500	17546

Reagent Setup:


Parameters	Value
Reagent Version	A1
Test Mode	96s-HbA1C

Matrix Labs. Representatives:

Date: 16.03.2024

A. Performed By:

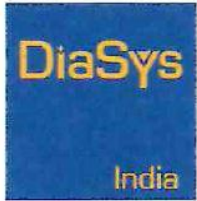
Instrument has been checked thoroughly and ensured the performance of the instrument and can be released for the routine operation.


MUNEESH M
 (Installation Engineer Signature & Name)

B. Verified By:

Instrument has been verified & released for the routine operation.


A.RAVI KUMAR
 (GM-Engineering Services Signature & Name)



Calibration Certificate

Following voltages have been checked & adjusted on DiaSys SYS 1000 (Sl. No. A042307012) at KRSNAA Diagnostic Lab, Inside Civil Hospital , Una

Calibration Report:

System voltages are in the specified range – Checked by Digital Multimeter are as below:

S.No.	Module	Observed Value	Acceptable Range
1	Power supply board o/p	+24.1 VDC	+24.0 +/- 0.5 VDC
		+05.0 VDC	+05.0 +/- 0.2 VDC
2	Lamp voltage	+12.1 VDC	12.0 +/- 0.5 VDC

System Temperature values are in the specified range –Checked by Digital Thermometer are as below:

S.No.	Module	Observed Value	Acceptable Range
1	Reaction Disk Temp	37.0 C	37.0 C +/- 0.3 C

Photometer Adjustment Values are within range as recommended:

S.No.	Module	Observed Value	Acceptable Range
1	ADC Count for all Wavelengths	10,240 to 10,300	8000 to 18,000

- All other mechanisms have been checked through field service program & Software, found OK.
- Performed calibration for End Point, Kinetic & Fixed Time Kinetic. Run control & sample. Results were satisfactory.
- Next Calibration will be performed on 28/10/2024

For DiaSys Diagnostics India Pvt. Ltd.



Asmat Sami

Date: 28/10/23

Regional Service Manager

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