MATRIX LABS

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:
REDCLIFFE LIFETECH PVT LTD
#402, PANNER NAGAR, MOGAPPAIR,
AMBATTUR, CHENNAI- 600 037.

Installation Date : **17.08.2022**
Calibration Date : **17.08.2022**
Calibration Due Date: **16.08.2023**

Instrument Serial No: **IA2B00001633**

Software Version Information:

System Version:	**01.00.21-S**
MCU1 Version:	**01.00.02-H**
MCU2 Version:	**01.00.01-G**

Monitoring Information:

Test Mode	**96s-HbA1C**
HP Pressure pump stepping Value	**96**
Column Temp	**40**
H9 Temp	**40**
ADC 415	**25300**
ADC 500	**18100**
ADC	**7126**

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	90
Distance from Rack Detector to 1st Tube(0-50mm)	3
Distance Between 2 Consecutive Tubes(150-250mm)	197

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	34	47
HbA0	50	90

Pressure Settings:

Parameters	Value
Pressure (Mpa) >	3
Pressure (Mpa) <	12
HP Pump(PPS)	90

Flow cell Adjustment:

Parameters	Value
DAC_LED	1985
Gain 415	25300
Gain 500	18100

Reagent Setup:

Parameters	Value
Reagent Version	SX
Test Mode	90s-HbA1C

Matrix Labs. Representatives:
Date: 17.08.2022

A. Performed By:

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

M.Parasuraman

PARASURAMAN M
(Manager – Customer Support Signature & Name)

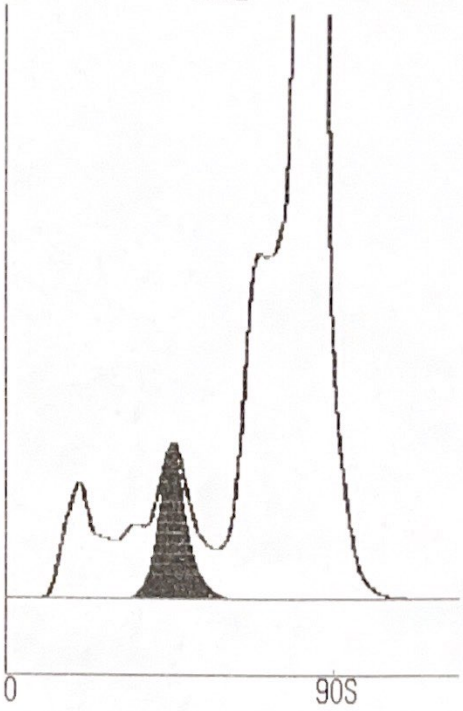
B. Verified By:

Instrument has been verified & released for the routine operation.

A.RAVIKUMAR
(G.M.-Engineering Services Signature & Name)

HbA1c

Time: 16:23:33
Date: 2022-12-21
Type: QC
Rack No.: 0001
Rack Position: 02
Sample ID: H8SX220072
Running No.: 0002



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0013	0.045	0.3
HbA1b	16	0.0041	0.168	1.4
HbF	22	0.0025	0.154	1.3
LA1c	38	0.0058	0.112	0.9
HbA1c	40	0.0059	0.727	5.6
HbA0	71	0.1646	10.408	90.5
V_Win	0	0.0000	0.000	0.0

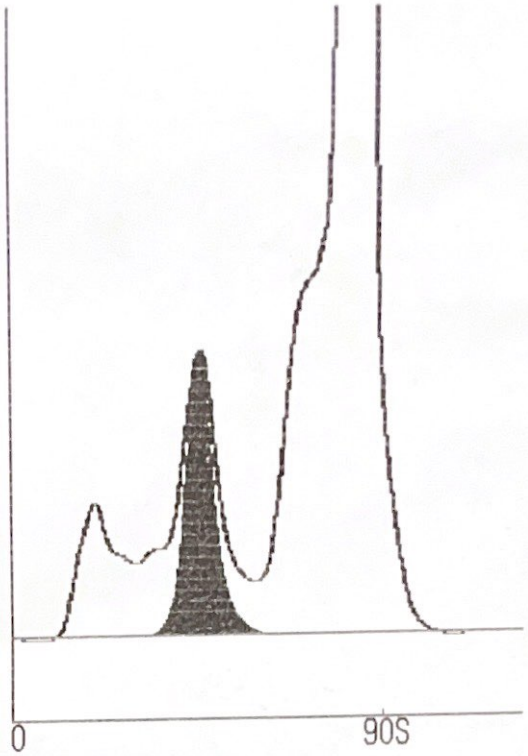
Total Area: 11.614

HbA1c	5.6% -	NGSP
HbA1c	37.7mmol/mol	IFCC
eAG	6.3mmol/l	ADA
eAG	113.6mg/dl	ADA

Reference Range:4.0%-6.1%
Operator:

HbA1c

Time: 16:25:12
Date: 2022-12-21
Type: QC
Rack No.: 0001
Rack Position: 03
Sample ID: H8SX220072
Running No.: 0003



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0015	0.051	0.4
HbA1b	16	0.0045	0.186	1.6
HbF	22	0.0031	0.186	1.6
LA1c	38	0.0098	0.137	1.2
HbA1c	40	0.0101	1.137	10.1
HbA0	71	0.1416	9.305	85.1
V_Win	0	0.0000	0.000	0.0

Total Area: 11.002

HbA1c	10.1% ↑	NGSP
HbA1c	86.8mmol/mol	IFCC
eAG	13.4mmol/l	ADA
eAG	242.4mg/dl	ADA

Reference Range:4.0%-6.1%
Operator: