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 LIFE TECH PVT.LTD,
M-16, Old DLF Road, Near SBI Bank,
Sec-14, Gurugam.

Installation Date : 06.**12.2023**
Calibration Date : 06.**12.2023**
Calibration Due Date: 05.**12.2024**

Instrument Serial No: **IA2B00002649**

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	**105**
Column Temp	**42**
H9 Temp	**41**
ADC 415	**25300**
ADC 500	**18100**
ADC	**7226**

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	105
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)	105

Flow cell Adjustment:

Parameters	Value
DAC_LED	**1960**
Gain 415	**25300**
Gain 500	**18100**

Reagent Setup:

Parameters	Value
Reagent Version	**SX**
Test Mode	**96s-HbA1C**

Matrix Labs. Representatives: Date:
06.12.2023

A. Performed By

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

JAWHAR RAJ L
(Manager – Customer Support Signature & Name)

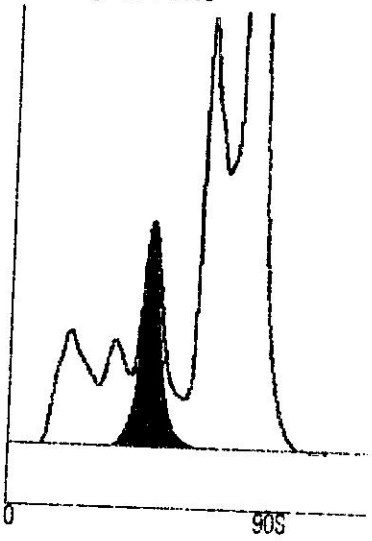
B. Verified By:

Instrument has been verified & released for the routine operation.

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

HbA1c

Time: 12:58:10
Date: 2024-03-06
Type: QC
Rack No.: 0001
Rack Position: 03
Sample ID: 9SX1230080
Running No.: 0003



Peak	Time	ABS	Area	Area%
HbA1a	12	0.0015	0.051	0.4
HbA1b	16	0.0050	0.214	1.7
HbF	22	0.0043	0.254	2.1
LA1c	40	0.0109	0.164	1.3
HbA1c	42	0.0108	1.177	10.0
HbA0	70	0.1923	10.043	84.5
V_Win	0	0.0000	0.000	0.0

Total Area: 11.903

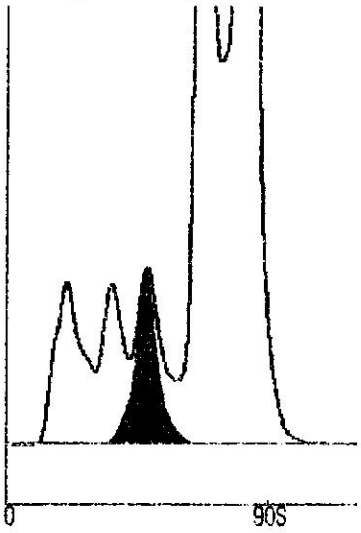
HbA1c	10.0% ↑	NGSP
HbA1c	85.7mmol/mol	IFCC
eAG	13.3mmol/l	ADA
eAG	239.5mg/dl	ADA

Reference Range:4.0%-5.7%
Operator:

6/13/24

HbA1c

Time: 12:56:31
Date: 2024-03-06
Type: QC
Rack No.: 0001
Rack Position: 02
Sample ID: 9SX1230080
Running No.: 0002



Peak	Time	ABS	Area	Area
HbA1a	12	0.0020	0.072	0.4
HbA1b	16	0.0068	0.294	1.7
HbF	22	0.0049	0.322	1.8
LA1c	40	0.0087	0.201	1.1
HbA1c	42	0.0087	1.077	5.6
HbA0	70	0.2732	15.246	89.4
V_Win	0	0.0000	0.000	0.0

Total Area: 17.212

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

Reference Range:4.0%-5.7%
Operator:

6/13/24