SERCOM
BALANCE CALIBRATION

CALIBRATION CERTIFICATE
Certificate No. KIFORAHQPK – 1

PJLA
PJLA Accreditation No. 60261

Customer
SERCOM
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Calibration By
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info@sercom-usa.com
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Date
04/02/2021

Next Calibration
04/02/2022

Balance • Chemistry Department • Room 100

MANUFACTURER	MODEL	TYPE	MAX WEIGHT (g)	SERIAL	ASSET
Sartorius	SECURA225D-1S	Analytical	220	123456789	BAL-01

Additional Action Taken
Balance pan cleaned, balance leveled, balance housing cleaned.

Remarks
Unit in good condition. Minor issues with linearity observed.

Results
As found: PASS
As left: PASS

Service Technician

Jason Pacini

Room Conditions

ROOM TEMP (°C)	HUMIDITY (%)
22.1	25

NIST Traceability

DEVICE	MANUFACTURER	SERIAL NO.	LAST CALIBRATION	NEXT CALIBRATION	TRACEABILITY NO.
Environmental Probe	Control Company	192413851	08/20/2019	08/20/2021	6530-10642150
Weight Set #2	Troemner	2	07/22/2020	01/31/2022	01144827-1

As Found

TEST WEIGHT (g)	INDICATION (g)	TOLERANCE (%)	ERROR (%)	RESULT
220	219.9986	0.1	0.0006	PASS

Eccentricity

Eccentricity measures the error relating to variations in the positioning of weights on the weighing pan.

TEST WEIGHT (g)	INDICATION (g)	TOLERANCE (±g)	ECCENTRICITY (g)	RESULT
100		0.0003	0.0001	PASS

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           0.0000     0.0001
                0.0000
           0.0001     0.0000
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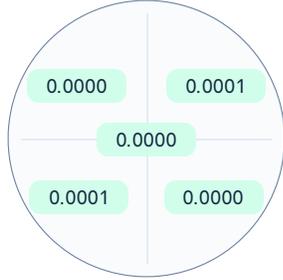
Linearity

Linearity refers to the ability to deliver identical sensitivity throughout the weighing capacity of a balance.

	TARE LOAD (g)	TEST WEIGHT (g)	INDICATION (g)	ERROR (g)	TOLERANCE (±g)	NON-TARED LINEARITY (g)	RESULT
1	N/A	0	0.0000	0.0000	0.0002	−0.0001	PASS
2	N/A	50	49.9999	−0.0001			
3	N/A	100	99.9999	−0.0001			
4	N/A	150	149.9999	−0.0001			
5	N/A	200	200.0000	0.0000			

	TARE LOAD (g)	TEST WEIGHT (g)	INDICATION (g)	ERROR (g)	TOLERANCE (±g)	TARED LINEARITY (g)	RESULT
1	0	50	50.0000	0.0000	0.0002	−0.0001	PASS
2	50	100	49.9999	−0.0001			
3	100	150	49.9999	−0.0001			
4	150	200	50.0000	0.0000			

Sensitivity

Sensitivity tests determine the minimum weight change that the balance can detect with a minimum readability of 0.0001.

TEST WEIGHT (g)	INDICATION (g)	TOLERANCE (±g)	SENSITIVITY (g)	RESULT
200	200.0000	0.0002	0.0001	PASS

Repeatability

Repeatability refers to the ability to display the same value when a weight is placed on a scale more than one time.

TEST WEIGHT (g)		INDICATION (g)	ERROR (g)	TOLERANCE (±g)	REPEATABILITY (g)	RESULT
100	1	100.0000	0.0000	0.0001	0.00004	PASS
	2	100.0000	0.0000			
	3	100.0000	0.0000			
	4	99.9999	−0.0001			
	5	100.0000	0.0000			
	6	100.0000	0.0000			
	7	100.0001	0.0001			
	8	100.0000	0.0000			
	9	100.0000	0.0000			
	10	100.0000	0.0000			

As Left

TEST WEIGHT (g)	INDICATION (g)	TOLERANCE (%)	ERROR (%)	RESULT
220	220.0000	0.1	0.0000	PASS

Expanded Uncertainty

The expanded uncertainty (U) combines uncertainties for readablity, linearity, eccentricity, repeatability and sensitivity with k = 2.

U = 0.0002 g

TPM Procedures Utilized   Software: Labrify 1.0.0   Cert. Version 1.1   Cert. KIFORAHQPK – 1   Printed: 04/02/2021