



Mass Calibration Certificate

Certificate #: 137419



Calibration Performed By
 PREMIER SCALES & SYSTEMS
 4901 NORTH SAINT JOSEPH AVE.
 EVANSVILLE, IN 47720

Customer
 KOENIG SCALE
 4779 EAST MARGARET DRIVE
 TERRE HAUTE, IN 47803

Weight and Test Information

Equipment I.D.: **59810**
 Description: TEST WEIGHTS, STAINLESS STEEL
 Manufacturer: TROEMNER / RICE LAKE
 Denomination: KIT: 2 KG TO 1 G
 Class: ASTM CLASS 1
 Condition of Item(s) as Received: OOT

Serial Number: 59810
 Temp. / Humidity / Pressure: 20.10 ° C / 51.4 % / 747.9 mmHg
 Performed By: *[Signature]* DTHOMAS
 Receive Date: 09-Jun-23
 Calibration Date: 06-Jul-23
 Calibration Due: **06-Jul-24**

Comments

10g weight out of tolerance as found, adjusted and re-tested to ASTM CLASS 1 specifications. In tolerance as left.
 1kg , 200g, 20g, 2g weights needed to be adjusted to meet under 50% of tolerance requirement.

Calibration Results

Nominal / I.D.	Results	As Found	Tolerance ±	Uncertainty ±	Results	As Left	Assumed Density (g/cm³)
2 kg / L961	P	0.0 mg	5.0 mg	1.7 mg	P	0.0 mg	7.84
1 kg / L960	NP	-2.15 mg	2.50 mg	0.97 mg	P	-1.15 mg	7.84
500 g / L959	P	-0.40 mg	1.20 mg	0.47 mg	P	-0.40 mg	7.84
200 g / L958	P	0.08 mg	0.50 mg	0.25 mg	P	0.08 mg	7.84
50 g	NP	-0.085 mg	0.120 mg	0.040 mg	NP	-0.085 mg	7.95
20 g	P	-0.040 mg	0.074 mg	0.027 mg	P	-0.019 mg	7.95
20 g •	P	0.009 mg	0.074 mg	0.027 mg	P	0.009 mg	7.95
10 g	*F	0.114 mg	0.050 mg	0.018 mg	P	-0.019 mg	7.95
5 g	P	0.011 mg	0.034 mg	0.011 mg	P	0.011 mg	7.95
2 g	P	-0.0030 mg	0.0340 mg	0.0092 mg	P	-0.0030 mg	7.95
2 g •	P	0.0205 mg	0.0340 mg	0.0092 mg	P	-0.0075 mg	7.95
1 g	P	0.0092 mg	0.0340 mg	0.0098 mg	P	0.0092 mg	7.95

Standard(s) Used

Kit/I.D. Number	Description	Traceability Number	Calibration Due
2XQK	METRIC CHK STANDARD KIT	3043900F	4/7/2024
2XQL	METRIC WORKING STANDARD KIT	3043900G	4/7/2024

Test Point Descriptors:

- P = Pass** : Compliance - The measurement result is within the specification limit when the measurement uncertainty is taken into account.
- *F = Fail** : Non-compliance - The measurement result is outside the specification limit when the measurement uncertainty is taken into account.
- NP = Not Possible** : It is not possible to state compliance even though the measurement result ± the uncertainty value overlaps the specification limit.

All values listed were determined by comparing the artifacts to Premier Scales & Systems' reference standards which are traceable to the International System of Units (SI), by an accredited lab or a recognized National Institute of Standards and Technology (NIST) state laboratory, through the traceability number(s) listed. All "As Found" and "As Left" values are reported as the correction value of the conventional mass of the artifact. Documented results contained within this calibration certificate relate only to the artifacts calibrated on the date listed. The uncertainty is obtained by taking the root sum square of the Type A and Type B components and multiplying by a k factor of 2 to obtain a confidence level of approximately 95 %. The uncertainty values and measurement results are included in the pass / fail condition of the artifact(s). The uncertainty values do not include a component for magnetic properties, air buoyancy corrections or handling and use. Premier Scales & Systems shall not be held liable for any inaccuracies of the artifacts after time of test. This document may not be reproduced, except in full, without the written approval of Premier Scales & Systems.

Chris D Bradford 7/26/23



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BP-0581	BAROMETER, DIGITAL	CL053-31862-397	2/22/2024
CC111	MASS COMPARATOR	15790-S-01282022-071632	2/29/2024
CC2001	MASS COMPARATOR	26766-S-01282022-72615	2/29/2024
EV-MSTD-TEMP/HUM-01	HYGROMETER, DIGITAL	4185-14075554	5/31/2025
SW1	TEST WEIGHTS, STAINLESS STEEL	2022-0972	12/31/2027

Procedure(s) Used

Procedure Number	Description	Revision Level	Revision Date
NISTIR 6969 SOP 4	DOUBLE SUBSTITUTION	2019	5/31/2019

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Chris O'Connell 7/26/23