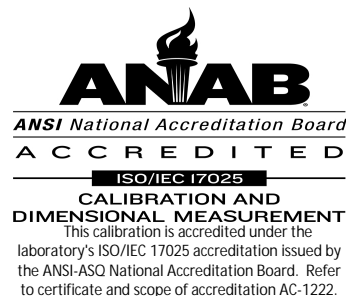




# Mass Calibration Certificate

Certificate #: 137417



**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.: **59445**  
 Description: TEST WEIGHTS, STAINLESS STEEL  
 Manufacturer: TROEMNER  
 Denomination: KIT: (50 TO 1) G  
 Class: ASTM CLASS 1  
 Condition of Item(s) as Received: IN TOLERANCE

Serial Number: 59445  
 Temp. / Humidity / Pressure: 20.10 ° C / 45.4 % / 747.9 mmHg  
 Performed By: *[Signature]* DTHOMAS  
 Receive Date: 09-Jun-23  
 Calibration Date: 06-Jul-23  
 Calibration Due: **06-Jul-24**

**Comments**

**Calibration Results**

Nominal / I.D.	Results	As Found	Tolerance ±	Uncertainty ±	Results	As Left	Assumed Density (g/cm³)
50 g	P	-0.031 mg	0.120 mg	0.040 mg	P	-0.031 mg	7.95
20 g	P	0.024 mg	0.074 mg	0.027 mg	P	0.024 mg	7.95
20 g ·	P	0.001 mg	0.074 mg	0.027 mg	P	0.001 mg	7.95
10 g	P	0.022 mg	0.050 mg	0.018 mg	P	0.022 mg	7.95
5 g	P	-0.001 mg	0.034 mg	0.011 mg	P	-0.001 mg	7.95
2 g	P	0.0165 mg	0.0340 mg	0.0092 mg	P	0.0165 mg	7.95
2 g ..	P	-0.0091 mg	0.0340 mg	0.0092 mg	P	-0.0091 mg	7.95
1 g	P	-0.0108 mg	0.0340 mg	0.0098 mg	P	-0.0108 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
BP-0581	BAROMETER, DIGITAL	CL053-31862-397	2/22/2024
CC111	MASS COMPARATOR	15790-S-01282022-071632	2/29/2024

**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



# Mass Calibration Certificate

Certificate #: 137417



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

**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  $\pm$  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 Crawford* 7/26/23