

Traceable Certificate Number: 3710792
Contractor: LMI CORPORATION
 101 N ALLOY DR STE B
 FENTON, MI 48430

Purchase Order Number: 70021019
Client: LMI CORPORATION
 101 N ALLOY DR STE B
 FENTON, MI 48430

Date Received: 19 Apr 2024
Date Calibrated: 24 Apr 2024
Recalibration Date: 24 Apr 2029
NIST Certificate Number: 684/O-0000046697

If there are two NIST numbers, one or both may apply

Calibrated By: 41
Procedure: WI05-0023 Rev. L
Condition of Weights: Acceptable for Calibration
Description of Weights: 200 g to 5 kg Satin Finish Weights, NIST Class F, S/N 8818 through 813X
Comments: Stickers removed after As Found value was obtained. Any sticker or label placed on the weight after calibration invalidates the results of this calibration certificate.



Key Notes

Finish	✱	Indicates the weight does not meet the finish requirements
Material	⊕	Indicates the weight does not meet the material requirements
New Wt	◇	Indicates new weight
Missing Wt	▲	Indicates replaced missing weight with new weight
Damaged Wt	✕	Indicates replaced damaged weight
Replaced OOT	★	Indicates replaced out of tolerance weight
OOT	⊗	Indicates correction plus or minus Uncertainty greater than or equal to MPE
Magnetic Wt	★★	Indicates replaced magnetic weight
Design	⊙	Indicates the weight does not meet the design or shape requirements
Repainted	■	Indicates the weight was repainted after As Found obtained
Other	⊕	See comments above

Cleaning Levels

A	Dusted with brush or cloth
B	Spot cleaned with ethyl alcohol
C	Full surface cleaned with ethyl alcohol
D	Spot cleaned with non-alcohol solvent followed by ethyl alcohol
E	Full surface cleaned with non-alcohol solvent followed by ethyl alcohol
F	No cleaning performed

Material Abbreviations

AL	Aluminum	TA	Tantalum
SS	Stainless Steel	BR	Brass
CI	Cast Iron	PL	Platinum
IR	Iron	NS	Nickel Silver
MS	Mild Steel	OR	Other/Unknown

Check with your local state agency for certification of compliance on Legal-for-Trade items. The weight accuracy class is referenced in the Description of Weights. Unless otherwise noted, the weights calibrated meet the requirements of the accuracy class. Results relate only to weights calibrated. The Surface Finishes of weights are evaluated visually. Weights are screened for magnetism using work instruction WI05-0035 when they are new, when requested by the customer or when weights are suspected of not meeting specifications. Density if measured is measured using OIML R111-1 (2004) method A2. Conventional Mass is reported based on a reference density of 8.0 g/cm³. The Uncertainty of Measurement is included in the determination of Maximum Permissible Error (MPE) Pass/Fail Criteria. The specifications for Maximum Permissible Error (MPE) can be found in NIST Handbook 105-1 (2019), NIST Handbook 105-1 (1990), ASTM E617-23 or OIML R111-1 (2004), manufacturer specifications or customer specifications.

The Uncertainty assigned to the Conventional Mass values are the result of the root-sum-square of the type A and type B components, calculated in accordance with NIST SOP 29 and the Guide to the expression of uncertainty in measurement, with coverage factor ($k=2$), to express the expanded uncertainty with an approximate 95.45% confidence level. This report is not to be used to claim product certification, approval, or endorsement by NVLAP, NIST, A2LA, or any government agency. **This document and all data within, shall not be reproduced, except in full, without the written approval of Rice Lake Weighing Systems.**

ID: LMI CORPORATION - 7YBN
 Desc: 1KG Weight
 By: RICE LAKE WEIGHING SYSTEMS
 Done: 4/24/2024 Due: 4/24/2029

ID: LMI CORPORATION - 8818
 Desc: 200Gram Weight
 By: RICE LAKE WEIGHING SYSTEMS
 Done: 4/24/2024 Due: 4/24/2029

ID: LMI CORPORATION - 813X
 Desc: 5KG Weight
 By: RICE LAKE WEIGHING SYSTEMS
 Done: 4/24/2024 Due: 4/24/2029

Dan Demers, Metrologist

24 Apr 2024

Issued Date:



Prepared By:
Rice Lake Weighing Systems® PN 64784●1/24
 230 West Coleman Street●Rice Lake, WI 54868●USA
 TEL: 715-234-9171●FAX: 715-234-6967
 Definitions: <http://certs.ricelake.com/certs/DefinitionsV2.docx>
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Certificate of Weight Calibration

ISO/IEC 17025:2017 & ANSI/NCSL-Z540-1-1994 ACCREDITED

Traceable Certificate Number: 3710792
 Client: LMI CORPORATION
 Date Calibrated: 24 Apr 2024

Temperature Range: 21.60 °C to 21.78 °C
 Pressure Range: 738.57 mmHg to 739.02 mmHg
 Relative Humidity Range: 47 % to 50 %

As Left Data (As Found Data is undifferentiated from As Left Data unless listed in As Found Data table)

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
200 g	8818	200.0095	9.5	200.0089	8.9	4.8	40	Y	7.84	SS	II	1813Q	D563Q	1.1587	A
500 g	8819	500.0257	25.7	500.0242	24.2	9.0	70	Y	7.84	SS	II	1808Q	D563Q	1.1587	A
1 kg	7YBN	1.000026	26	1.000023	23	13	100	Y	7.84	SS	II	1808Q	D563Q	1.1585	A
2 kg	7YBM	2.000089	89	2.000083	83	25	200	Y	7.84	SS	II	1808Q	D563Q	1.1586	A
5 kg	813X	5.000161	161	5.000146	146	61	500	Y	7.84	SS	II	1808Q	D563Q	1.1585	A

As Found Data

Nominal Value	Unique ID	True Mass (Same UOM as Nom.)	True Mass Corr. (mg)	Conv. Mass (Same UOM as Nom.)	Conv. Mass Corr. (mg)	(k=2) Unc. (± mg)	MPE (± mg)	MPE Pass (Y=Pass N=Fail)	Assumed Density (g/cm ³)	Assumed Material	Const. Type	Balance Used	Reference Standard Set Used	Air Density (mg/cm ³)	Clean Level
200 g	8818	200.0690	69.0	200.0684	68.4	4.8	40	N ☒	7.84	SS	II	1813Q	D563Q	1.1584	A
500 g	8819	500.0772	77.2	500.0757	75.7	9.0	70	N ☒	7.84	SS	II	1808Q	D563Q	1.1590	A
1 kg	7YBN	1.000079	79	1.000076	76	13	100	Y	7.84	SS	II	1808Q	D563Q	1.1585	A
2 kg	7YBM	2.000142	142	2.000136	136	25	200	Y	7.84	SS	II	1808Q	D563Q	1.1588	A
5 kg	813X	5.000213	213	5.000198	198	61	500	Y	7.84	SS	II	1808Q	D563Q	1.1586	A