



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
DIVISION OF QUALITY ASSURANCE AND REGULATIONS
28 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0028

Amanda E. Beal
COMMISSIONER

Celeste Poulin
Director

REPORT OF CALIBRATION
MAINE TEST NUMBER 7526ME

Stainless steel grip weights
(20) 20 kg & (2) 10 kg

Date of Report: December 20, 2019

SUBMITTED BY:

Advanced Scale, Inc.
13 Delta Drive Unit 6
Londonderry, NH 03053

The mass standards described above have been compared with standards of the State of Maine, by modified substitution (NIST SOP 8), and were found to be, or adjusted to within NIST Handbook 105-1 Class "F" tolerances.

Standards of the State of Maine are traceable to the National Institute of Standards and Technology through Oregon State test number OR-18-257-C. The Maine Laboratory is recognized by NIST, OWM, under the "Laboratory Metrology Program", at Mass Echelon III for 2019. Measurements by this laboratory are traceable to the National Standards at NIST.

The mass standards described above were found to have mass values at the time of test as indicated in the tabulation on the following page. Weights received in an out of tolerance condition will show a value in a "before adjustment" column if required.

The uncertainties shown with reported values are calculated on the conventional mass values and expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, including bias, and (2) Type A, random errors determined by the standard deviation of the measurement process. Type A and Type B uncertainties are combined by the root sum squared method and multiplied by a coverage factor to represent approximately a 95% confidence level. All mass values have been determined as "conventional mass" with respect to stainless steel with a density of 8.0 g/cm^3 at $20 \text{ }^\circ\text{C}$. The combined measurement uncertainty and result have been taken in to account when issuing statements of compliance.

Page 1 of 2



PHONE: (207) 287-7587

FAX: (207) 287-7161

NVLAP Lab Code 200414-0

F:\Metrology Lab\Calibrations\Calibration 2019\Mass III metric\Advanced Scale_7526ME.doc

Advanced Scale, Inc.
MAINE TEST NUMBER 7526ME
Page 2 of 3

| Nominal & Marking | Conventional mass, g | Correction mg | NIST Class F Tolerance, mg | Uncertainty mg |
|-------------------|----------------------|---------------|----------------------------|----------------|
| 20 kg 5IED | 20000.643 | 643 | 2000 | 300 |
| 20 kg 5IEE | 20000.593 | 593 | 2000 | 300 |
| 10 kg 5IEI | 10000.121 | 121 | 1000 | 140 |
| 10 kg 5IEJ | 10000.173 | 173 | 1000 | 140 |

Calibrations performed by this laboratory comply with the requirements of ISO/IEC 17025:2017

Data reduction sheets are on file at the laboratory.

Environmental conditions at time of test:

Temperature: 20.0 °C

Relative Humidity: 41.1 %

Barometric Pressure: 767.39 mmHg

Items received in good condition.

Date Received: December 16, 2019 & December 17, 2019

Date of Test: December 20, 2019

Calibration Due: Not specified

Calibration by: Bradford Bachelder



Bradford Bachelder, Metrologist

This report may not be reproduced, except in full, without written permission from this laboratory. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, The State of Maine, or any other state or federal government agency. Calibration performed at 333 Cony Road, Augusta, Maine 04330.

