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### Kansas Metrology Laboratory Calibration Certificate

Submitted by: Accurate Superior Scale of KC Inc  
1830 Linn St  
N Kansas City, MO 64116

Certificate Number : K16669  
Certificate Issue Date : 4/1/2022  
Submission Date : 3/28/2022  
Calibration Date : 4/1/2022  
Due Date : 4/1/2023

Condition : used

Calibrated	Adjusted	Rejected
207	72	8

	Temperature	Relative Humidity	Barometric Pressure
Initial	19.9 °C	54.2 %	974.73 hPa
Final	20.4 °C	54.2 %	975.25 hPa

Conformity Statement: Standards are evaluated for conformance to specifications, except for density, magnetism, and surface finish. Assumed density, which is obtained from documentation about the standards, is used where applicable. Standards are calibrated as found, after acclimation with laboratory conditions, and recalibrated if adjustment is required. Standards conform to specifications and maximum permissible errors (MPE), unless listed as "Rejected" or otherwise noted. Specifications, MPE's, or their sources listed as "N/A" are not applicable to the calibration. Measurements and uncertainties comply with published decision rules that require the expanded uncertainty to be less than 1/3 the MPE and require the measurement plus or minus the expanded uncertainty to be within the MPE. True mass is the weight of a standard in vacuum. Conventional mass is the weight of a standard at a reference air density of 0.0012 g/cm<sup>3</sup>, compared to reference standards at a reference density of 8.0 g/cm<sup>3</sup>, at a reference temperature of 20 °C.

Calibration Procedures:

- For standards: NISTIR 6969 (May 2019): SOP 8

Specifications and MPE Sources:

- For NIST Class F: NISTHB 105-1 (May 1990), NISTHB 105-1 (May 2019)
- For ASTM classes: ASTM E617-18

Conversion Factors: 1 kg = 1 000 g = 1 000 000 mg, 1 lb = 453.592 37 g, 1 oz = 28.349 523 125 g, 1 lb = 16 oz

Uncertainty Statement: The combined standard uncertainty includes the standard uncertainty reported for the standards, the standard uncertainty for the measurement process, the standard uncertainty for any uncorrected errors associated with buoyancy corrections (applies to mass values only), the standard uncertainty for any uncorrected errors associated with temperature correction (applies to length and volume values only), the standard uncertainty for balance drift, the standard uncertainty of balance sensitivity, and a component of uncertainty to account for any observed deviations from the National Institute of Standards and Technology (NIST) values that are less than surveillance limits. The combined standard uncertainty is multiplied by the coverage factor (k-value), which is based on the degrees of freedom, to give the expanded uncertainty, which defines an interval having a level of confidence of 95.45 %. The expanded uncertainty contained in this certificate is consistent with the OIML G 1-100 Edition 2008 (E), Evaluation of measurement data – Guide to the expression of uncertainty in measurement. The expanded uncertainty is not to be confused with the MPE during application.

Traceability Statement: The standards of the Kansas Metrology Laboratory are traceable to the International System of Units (SI) through NIST and are part of a comprehensive measurement assurance program for ensuring continued accuracy and measurement traceability within the level of uncertainty reported by this laboratory. The certificate number listed above is the unique identifier to be used when referencing measurement traceability for the items contained in this certificate only.

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Evan Johnson, Metrologist