



Food Safety & Consumer Protection Div
Consumer Protection Section

[phone] 802-828-2426
 [fax] 802-828-5983

Agency of Agriculture Food & Markets

116 State Street
 Montpelier, VT 05620
www.VermontAgriculture.com

Vermont Weights and Measures Metrology Laboratory
 Test Report

Issued To:

Advanced Scale
 13 Delta Drive Unit 6
 Londondery, NH 03106
 603-626-0242

Vermont Test Number: VT16-62
 Date of Test: March 29, 2016
 Report of Test for Item (Make/Model/Serial Number/#Pieces):

Rice Lake/5 Kg-1g SS Weight Kit/VT05-481/21 Pieces

The mass standards described above have been compared to the standards of the State of Vermont, by SOP 8 (modified substitution), and have been found at time of test, or adjusted, to meet the requirements stated in NIST Handbook 105-1 Specifications and Tolerances for Reference Standards and Field Standard Weights and Measures (Class F). Standards of the state of Vermont are traceable to the SI and National Institute of Standards and Technology (NIST). The Vermont Laboratory is recognized by NIST, under the Laboratory Metrology Program at Mass Echelon III. The mass standards described above were found to have a mass value at the time of test as indicated in the following tabulation. Weights received in an out of tolerance condition show a value in the "before adjustment" column.

The uncertainties shown are expressed as the sum of the following sources of inaccuracy; (1) Type B, systematic errors relative to the reference standard and procedure used, 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 of *k* (in chart) for an approximate 95% confidence interval.

Environmental conditions at time of test:

Temperature: 19.8° C
 Relative Humidity: 45.9 % RH

Mass Comparator: MT XP5003S, MT XP205

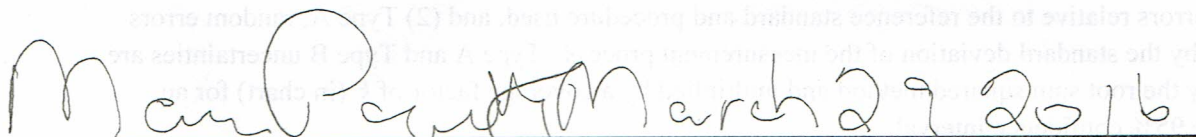


The State of Vermont is an Equal Opportunity / Affirmative Action Employer and Provider

Weight	Nominal	Correction mg	Uncertainty mg	NIST Class F Tolerance mg	Before Adjustment mg	k Factor
5 kg	5 kg	145	25	500		2.06
5 kg*	5 kg	110	25	500		2.06
2 kg	2 kg	47	5	200		2.06
2 kg*	2 kg	54	5	200		2.06
1 kg	1 kg	25.3	3.9	100		2.06
500 g	500 g	20.0	3.5	70		2.07
500 g*	500 g	24.0	3.5	70		2.07
500 g**	500 g	24.0	3.5	70		2.07
500 g***	500 g	17.0	3.5	70		2.07
500 g****	500 g	20.0	3.5	70		2.07
200 g	200 g	14.8	2.9	40		2.07
200 g*	200 g	14.8	2.9	40		2.07
100 g	100 g	6.2	0.5	20		2.07
50 g	50 g	1.64	0.41	10		2.07
20 g	20 g	1.21	0.11	4		2.07
20 g*	20 g	0.32	0.11	4		2.07
10 g	10 g	-0.012	0.114	2		2.07
5 g	5 g	0.343	0.071	1.5		2.07
2 g	2 g	0.325	0.067	1.1		2.07
2 g*	2 g	0.275	0.067	1.1		2.07
1 g	1 g	0.185	0.065	0.9		2.07

Additional documentation material available on request.

The following weights were adjusted: None


 Marc Paquette/Vermont Agency of Agriculture
 Consumer Protection Section/Metrologist
 Weights and Measures Specialist