

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: **Computing Scale Digital Electronic** Model: DLP-300 nmax: 3000 emin: 0.005 lb/0.01 lb or 0.01 lb/0.02 lb Capacity: 15/30 lb or 30/60 lb Platform: 14.3 in x 11.1 in Accuracy Class: III

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5	Standard Features and Options
 Multi-Interval Scale Automatic Zero Tracking (AZT) Initial Zero Setting Mechanism (IZSM) Semi-Automatic (Push Button) Zero Keyboard Tare Programmable Tare Tare Save Key AC Power (Nominal 120 VAC) Customer Display Gross/Net Display Liquid Crystal Display (LCD) Unit of Measure: Ib 	
Temperature Range10 C 10 40 C (14 1 10 104	1)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Kristin Mačev Chairman, NCWM, Inc.

Jerry Buendel Committee Chair, National Type Evaluation Program Committee Issued: May 4, 2017

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SHANGHI DB SCALE CO., LTD

Computing Scale / DLP-300

Application: This is a computing scale used in general purpose weighing for direct sale, or prepacking. There are two DLP-300 models covered by this certificate (15/30 lb x 0.005/0.01 lb Multi-Interval or 30/60 lb x 0.01/0.02 lb Multi-Interval)

Identification: The required marking information is on a metal ID tag riveted to the side of the scale, or on the post mounted display.

<u>Sealing</u>: On the bottom of the scale there is a plate that is secured by a wire seal threaded through two drilled head screws preventing access to the calibration switch. (See picture below)

Operation: Near the bottom of the weight display on the right side there are a series of annunciators (R, X, S, Z) Below is a brief description of what the annunciators represent.

R Mode : R mode is used to perform most daily operations such as weighing commodities, recalling programmed commodities and issuing labels. After normal power on procedures the scale will be in the R mode.

X Mode : X mode is used to perform Sales Reports using information obtained during normal daily operations of the scale.

S Mode : S mode is where most of the programmed information used during daily operations is directly entered at the scale.

Z Mode : Z mode is used to reset information in the scale back to a factory default configuration or clearing the programmed information out of memory.

<u>Test Conditions</u>: The emphasis of this evaluation was on device design, marking requirements, operation, performance, and compliance with influence factors. Two DLP-300 scales were submitted for evaluation (15/30 lb x 0.005/0.01 lb and 30/60 lb x 0.01/0.02 lb). Several increasing/decreasing load and shift test were performed. A zone or uncertainty/ discrimination test, warm up test, power interruption test, and suitability of level indicator test were also performed. Both scales were tested over a temperature range of $-10 \,^{\circ}$ C to 40 $^{\circ}$ C (14 $^{\circ}$ F to 104 $^{\circ}$ F). A load of approximately ½ of the scale capacity was applied more than 100 000 times. The scale was tested periodically during this time. Additionally, tests were conducted using 102 VAC and 132 VAC power supplies. The checklist from Pub 14 was used to ensure the scales met zero, tare, price computing, marking, motion, and all other requirements.

Evaluated By: T. Buck (OH)

Type Evaluation Criteria Used: NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2017 Edition. NCWM Publication 14 Weighing Devices, 2017 Edition.

<u>Conclusion</u>: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: J. Truex (NCWM)

Examples of Device:

