



## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Non-Computing Scale  
Wheel-Load Weigher, Digital Electronic  
Model: SAW 10A, SAW 10C, SAW 10A III & SAW 10C III  
 $n_{max}$ : 400  
Capacity: 20 000 lb x 50 lb  
Platform: See Below  
Accuracy Class: IIII

**Submitted By:**

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**Standard Features and Options**

- Battery power supply; rechargeable through vehicle cigarette lighter
- Strain gauge transducer
- Semi-automatic zero (power switch)
- Cable connection to two scales to obtain axle weight

**Options:**

- High Strength Baseboards
- Additional Baseboards
- Model 10A: Short Handle

**Platform Size:**

- SAW 10A & SAW 10A III: 22 in x 15 in
- SAW 10C & SAW 10C III: 22 in x 19.25 in

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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.

Ronald Hayes  
Chairman, NCWM, Inc.

John Gaccione  
Committee Chair, National Type Evaluation Program Committee  
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### **International Road Dynamics Inc.**

Non-Computing Scale / SAW 10A, SAW 10C, SAW10 A III & SAW 10C III

**Application:** For use in highway law enforcement. The scale is marked "Only For Weighing Wheel Loads."

**Identification:** The identification badge for the SAW 10A and SAW 10C is located on the top of the scale and to the right of the weight display. The ID badge for the SAW 10A III and SAW 10C III is a self-destructive adhesive label located on the top side of the device in the area between the display and the handle.

**Sealing:** For the SAW 10A & SAW 10C, a lead and wire seal may be threaded through a bolt and 2 holes in the scale housing to the right of and slightly above the indicator. The screw passes through the housing and threads into the bottom plate and prevents this plate from being removed without breaking the seal. The SAW 10A III, and SAW 10C III is sealed with two screws that have holes drilled through them that attach the plate covering the weight display to the scale preventing access to the calibration button.

**Test Conditions:** This Certificate of Conformance supersedes Certificate of Conformance number 07-003P and is issued to add IRD PAT Traffic models SAW 10A III, and SAW 10C III. The model SAW 10A, and SAW 10C is being discontinued and being replaced by the SAW 10A III, and the SAW 10C III. Two model SAW 10C III wheel-load weighers were submitted for evaluation. Several increasing load tests were performed using 19 900 lb of known test weight. A discrimination test, an AZT test, and out-of-level tests of 3 degrees (5%) in all four directions were also conducted. The two devices were tested in pairs to 40 000 lb, and a DC voltage variation test from 6.00 VDC to 7.92 VDC using a calibrated proving ring. All testing was conducted using a 10 in x 18 in pad to simulate a pneumatic tire. According to the manufacture, this device is very similar to the discontinued model, therefore no further testing was deemed necessary. The previous test conditions are listed below for reference.

**Certificate of Conformance Number 07-003P:** The Model SAW10C was originally evaluated in 1985 (CC No. 21-85) and again in 1987 (CC 87-078P). For the purpose of this latest evaluation, Six IRD PAT Traffic SAW 10C Scales were submitted. Several increasing load/return to zero tests were performed at room temperature in the NTEP laboratory using 19 900 lb of certified weight. A weigh pad was placed between the platform and the weights to simulate a pneumatic tire. The scales were then tested in an out-of-level condition of 3 degrees (5%) in all four directions. Additional testing including zone of uncertainty, over capacity and behind zero was also performed at room temperature in the NTEP laboratory. Increasing load/return to zero tests were conducted on each scale to 19,900 lb using a calibrated Proving Ring. Two scales were also tested as a pair to 40 000 lb using the Proving Ring. The six scales were then used for 30 days and two of the scales were tested again in the same manner. The manufacturer also submitted test data for the SAW10A for scale accuracy and creep over a temperature range of -10 to 40 °C (14 to 104 °F). All temperature test equipment and procedures used are traceable to NIST Weights & Measures Standards.

NOTE: This Provisional Certificate is issued based upon influence factor test data provided by the manufacturer and test data collected at ambient temperature in the NTEP laboratory.

**Evaluated By:** T. Buck (OH), K. Johnson (OH), W. West (OH), T. Lucas (OH) 07-003P; T. Buck (OH), K. Johnson (OH), J Gibson (OH) 07-003PA1

**Type Evaluation Criteria Used:** *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2015 Edition. *NCWM Publication 14 Weighing Devices*, 2014 Edition.

**Conclusion:** The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Reviewed by:** S. Patoray, L. Bernetich (NCWM) 07-003P; J. Truex (NCWM) 07-003PA1

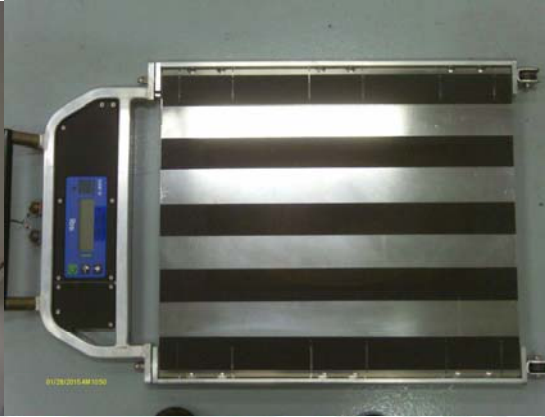


**International Road Dynamics Inc.**  
Non-Computing Scale / SAW 10A, SAW 10C, SAW10 A III & SAW 10C III

**Examples of Device:**



**SAW 10C**



**SAW 10C III**

