

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Weighing/Load Receiving Element

Digital Electronic Model: Icon n_{max}: 8000

e_{min}: 0.1 lb (0.05 kg) Capacity: 800 lb (400 kg)

Platform: See dimension and area information in SFO box

Accuracy Class: III

*Submitted By: Contact Info. Updated December 2022

Cardinal Scale Manufacturing Company

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Web site: <u>www.cardet.com</u>

Standard Features and Options

Platform Construction:

- Mild steel frame
- Plastic Platter

Platform Dimensions and Area:

- Platform dimensions of device evaluated: 17 in x 17 in (43.18 cm x 43.18 cm).
- Maximum platform area: 289 sq in (1864.5 sq cm).
- The platform length or width can be 125% greater than the evaluated dimensions (maximum of 21.25 in), but overall platform area cannot exceed 289 sq in.

Load Cells Used:

• Four Cardinal model FP-240 load cells (non-NTEP).

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of *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. *Editorial changes, not affecting the type or metrological content, corrected this certificate.

Ivan Hankins Chairman, NCWM, Inc. Hal Prince Chair, NTEP Committee Issued: June 17, 2022

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Application: General purpose weighing/load receiving element when connected to an NTEP certified and compatible indicating element.

<u>Identification</u>: The identification information is printed on a tamper-proof security label affixed to the platform. The plastic stand-on cover can be removed to find the label.

<u>Sealing</u>: The load receiving element has no metrological functions that require the use of a security seal. Calibration and configuration of the scale are done through the indicator and sealed according to the manufacturer's instructions for the indicator used.

Test Conditions: For this evaluation a Cardinal Scale Model Icon 17 in x 17 in (43.18 cm x 43.18 cm) 800 lb x 0.1 lb capacity weighing/load receiving element was submitted. The weighing element was attached to a Cardinal Scale indicating element Model 855 (Certificate Number 22-042). The emphasis of the evaluation was on device design, operation, marking requirements, performance, and compliance with influence factor requirements. Multiple increasing/decreasing load and eccentricity tests were performed. Discrimination and zone of uncertainty tests were conducted. The load receiving element was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half scale capacity was applied to the weighing/load receiving element over 100 000 times and at the conclusion of permanence testing increase/decrease and eccentricity testing was repeated.

Evaluated By: Jeff Gibson, B. Stone (OH)

<u>Type Evaluation Criteria Used</u>: Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2022 Edition. NCWM Publication 14: Measuring Devices, 2022 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: D. Flocken (NCWM)

Examples of Device:



Column-mounted indicator (shown with optional sonar height rod - not evaluated)

Remote-mounted indicator (no column)