



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: 380-2D, 380X-2D, 381-2D, see chart
 n_{max} : 10 000
Accuracy Class: III / III L

****Contact Info Change****

Submitted By:

Rice Lake Weighing Systems
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Standard Features and Options

- Semi-Automatic (push button) Zero Setting Mechanism
- Automatic Zero Tracking (AZT)
- Semi-Automatic (push button) Tare
- Initial Zero Setting Mechanism (IZSM)
- Auto power off and power save modes
- Keyboard Tare
- Gross/Net Display
- Voltage: 100 VAC to 240 VAC and 3 VDC to 15 VDC, see chart
- External Printer Capability
- Weight Accumulation
- Communication: RS-232, Bluetooth
- Liquid Crystal Display
- External Unit Switching (kg, g, lb, oz, t, tn)
- Stainless-Steel housing or ABS Plastic
- Category 1 sealing method (Wire Security Seal or Tamper-proof seal)

Extended Power Battery Options: 380-2D

<u>Model</u>	<u>Battery</u>	<u>Estimated Battery Life</u>
380-2D	(4) Alkaline C-Cell Batteries	20-100 hours depending on back light
380X-2D	Lithium Ion or Nickle Metal Hydride (NiMH)	Not Rated
381-2D-AA	(4) AA Batteries	40 hours
381-2D-NiMH	Nickle Metal Hydride (NiMH)	80 hours

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.

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Rice Lake Weighing Systems

Indicating Element /380-2D, 380X-2D, 381-2D

Application: General purpose indicating element for use with any NTEP certified and compatible weighing element.

Identification: The required information appears on a pressure sensitive label displaying “Void” when removed on the side of the indicator. The capacity x division statement is on a label adjacent to the weight display.

Sealing: The indicating element use a category 1 sealing method consisting of a wire seal threaded through two of the drilled head screws and thru a hole in the front panel preventing removal and access to the internal calibration jumper. The 381-2D series has a Category 1 sealing method that consists of a self-adhesive self-destructive tamper proof seal that is placed across the two half's of the front and back cover.

Test Conditions: These test conditions supersede 21-051. The purpose of this evaluation is to add new model's of indicators to the series and to add optional battery power alternatives. The emphasis of this evaluation was on the device design, operation, markings requirements, performance and compliance with influence factors. Two Rice Lake models were summited for this evaluation 380X-2D and 381-2D. Both models were connected to load cell simulators and tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F) and tests were also conducted using 85 VAC to 264 VAC and 3.35 VDC to 7.9 VDC during this time several increasing/decreasing, load discrimination, eccentricity tests were conducted. The devices were interfaced with a weighing/load receiving element and tested to verify compliance with zero, zone of uncertainty along with motion dedication requirements. The results of these test indicate that the devices perform within the required guidelines. Previous test conditions below are for reference.

Certificate of Conformance Number 21-051: The emphasis of the evaluation was on the device design, operation, marking requirements, performance, and compliance with influence factors. The indicator was interfaced with a weighing/load receiving element to verify compliance with zero, zone of uncertainty and motion detection requirements. A load cell simulator was interfaced to the device, multiple increasing/decreasing tests were performed. The device was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Tests were conducted using 85 VAC to 264 VAC and 2.9 VDC to 16.5 VDC.

Evaluated By: J. Gibson (OH) 21-051; B. Stone (OH) 21-051A1

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2023 Edition. NCWM Publication 14 Weighing Devices, 2022 Edition.*

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

Information Reviewed By: D. Flocken (NCWM) 21-051, 21-051A1



Rice Lake Weighing Systems
Indicating Element /380-2D, 380X-2D, 381-2D

Example of Device:

Model 380-2D

Sealing



Model 381-2D

Sealing

