NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Indicating Element
Digital Electronic, In-Motion or Static
Model: VIRTUi, VIRTUi2, & VIRTUi3
n_{max}: 10 000
Accuracy Class: III / III L

Submitted By:
Rice Lake Weighing Systems
230 W. Coleman St.
Rice Lake, WI 54868
Tel: 715-234-9171
Fax: 715-234-6967
Contact: Jan Konijnenburg
Email: jkonijnenburg@ricelake.com
Website: www.ricelake.com

Standard Features and Options

Standard Features:

- Center of Zero Indicator
- Gross/Net Weight Display
- Semi-automatic (push-button) Zero
- Semi-automatic (push-button) Tare
- lb/kg Units
- Print Capability
- VIRTUi= Single Display
- VIRTUi2 = Up to 5 Displays (including a summing display that is selectable)
- VIRTUi3 = Single Scale Display used for displaying weight values received from static or in-motion weighing instruments, large or small screens

Minimum System Requirements:

- Product Version: VIRTUi 1.0.5.27750 or Higher, VIRTUi2 2.0.0 or higher, VIRTUi3 3.1.0.0 or higher
- Operating System: Windows 98 or newer / Android 4.4 (KitKat) or higher
- Internet Explorer 5.5 or newer (Windows only)
- .NET Framework 1.1 (Windows only)
- 64 MB Ram
- 30 MB Free Hard Drive Space
- Hardware: Desk Top or Laptop PC, Wireless Handheld devices, all mobile devices supporting the Android 4.4 O.S. and higher
- Program language: C# / Java
- Serial Port, USB or Bluetooth connectivity capability.
- Note: This system also performs other accounting and record keeping functions that have no metrological effect on the weighing operation.

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.

Craig VanBuren
Chairman, NCWM, Inc.

Stephen Benjamin
Committee Chair, NTEP Committee
Issued: November 17, 2019

Rice Lake Weighing Systems

Indicating Element / VIRTUi, VIRTUi2, & VIRTUi3

Application: PC based virtual indicator designed to replicate the form and function of the IQ plus 355. The virtual front panel consists of a display and five-button keypad. Keys are activated by a mouse click. Wireless handheld device and mobile computers consists of a display and function keys.

Identification: The required information is displayed on the VIRTUi Screen under the "HELP" menu. The Capacity by Division Statement is located on the screen under the weight indication. On the handheld device, by pressing the button labeled “NTEP CC” a dropdown box will appear displaying required marking information. On mobile computers the identification can be found on the main screen.

Sealing: There is no two-way communication between the approved indicator and this system. Provisions for sealing metrological parameters are provided by the approved weighing and indicating elements.

Test Conditions: This Certificate of Conformance supersedes Certificate of Conformance 04-058A6 and is issued to add Static option to VIRTUi3. The emphasis of the evaluation was on device design, performance requirements. A VIRTUi3 with large & small screen was summited. Several performance tests were conducted to verify the device functioned correctly in the static mode. No other tests were deemed necessary. The previous test conditions are listed below for reference

Certificate of Conformance Number 04-058A6: This Certificate of Conformance supersedes Certificate of Conformance 04-058A5 and is issued to add an Android operating system for in-motion weighing. The emphasis of the evaluation was on device design, performance and marking requirements. Several performance tests were conducted to verify all the display functioned correctly. No other tests were deemed necessary. The previous test conditions are listed below for reference.

Certificate of Conformance Number 04-058A5: This Certificate of Conformance supersedes Certificate of Conformance 04-058A4 and is issued to add the VIRTUi3 software (see examples below). The VIRTUi3 version was designed to operate as the primary indicating element when interfaced with in-motion instruments. The emphasis of the evaluation was on device design and performance and was interfaced, wirelessly to the model CLS Lift Truck Scale (NTEP CC 06-074).

Certificate of Conformance Number 04-058A4: This Certificate of Conformance supersedes Certificate of Conformance 04-058A3 and is issued to add the latest model Handheld Wireless Device withVIRTUi2 software (see page 4). The emphasis of the evaluation was on device design, performance and marking requirements. The requirements in NTEP Publication 14, section on testing wireless devices were used. No other tests were deemed necessary.

Certificate of Conformance Number 04-058A3: This Certificate of Conformance supersedes Certificate of Conformance 04-058A2 and is issued to add a different display screen and include compatibility with a mobile computer. No metrological changes were made; therefore, no testing was deemed necessary.

Certificate of Conformance Number 04-058A2: This Certificate of Conformance supersedes Certificate of Conformance 04-058A1 and is issued to add the model Handheld Wireless Device withVertui2 software. The emphasis of the evaluation was on device design, performance and marking requirements. The requirements in NTEP Publication 14, section on testing wireless devices were used. No other tests were deemed necessary.

Certificate of Conformance Number 04-058A1: This Certificate of Conformance supersedes Certificate of Conformance 04-058 and is issued to add the model Vertui2, which has 4 main displays and a 5th display for summing. The emphasis of the evaluation was on device design, performance and marking requirements. Several performance tests were conducted to verify all the displays functioned correctly. No other tests were deemed necessary.

Certificate of Conformance Number 04-058: The emphasis of the evaluation was on the performance of the computer system, its interaction with the weighing system, marking requirements and the information printed on the weight ticket. The software was installed on an IBM compatible computer. A Rice Lake indicator, Model IQube (Certificate of Conformance Number 03-032) was used with a load cell simulator for the evaluation. The requirements for an indicating element along with other applicable requirements from NTEP Publication 14 were used as a guideline. Several increasing return to zero load tests were completed.

Evaluated By: A. McCoy (OH) 04-058; T. Lucas (OH) 04-058A1; M. Kelley (OH) 04-058A2; J. Morrison (OH) 04-058A1, 04-058A3, 04-058A4; D. Flocken (NTEP) 04-058A5, M. Kelley (OH) 04-058A6, 04-058A7

Rice Lake Weighing Systems

Indicating Element / VIRTUi, VIRTUi2, & VIRTUi3

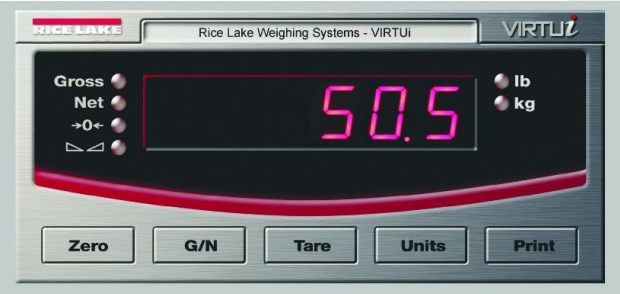
Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2019 Edition. *NCWM Publication 14 Weighing Devices*, 2019 Edition.

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

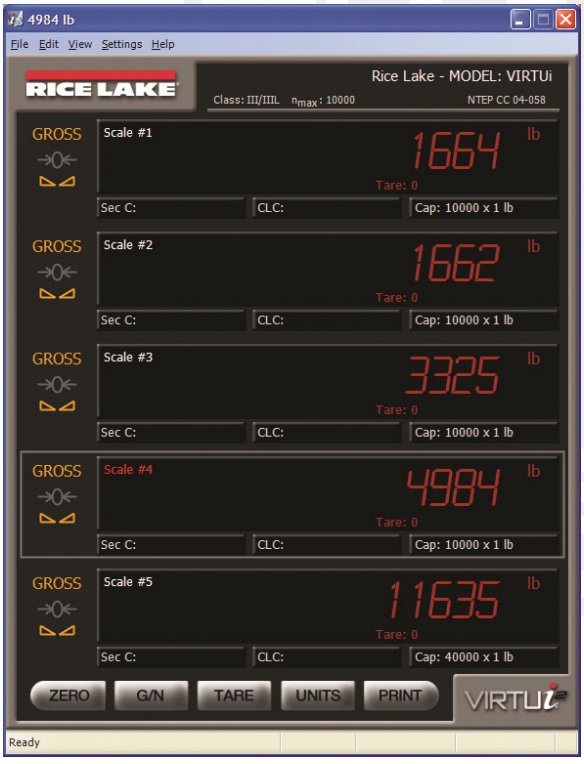
Information Reviewed By: J. Truex (NCWM) 04-058A1, 04-058A2, 04-058A3, 04-058A4, 04-058A5, 04-058A6; D. Flocken (NCWM) 04-058A7

Examples of Device:

Model VIRTUi



Model VIRTUi2

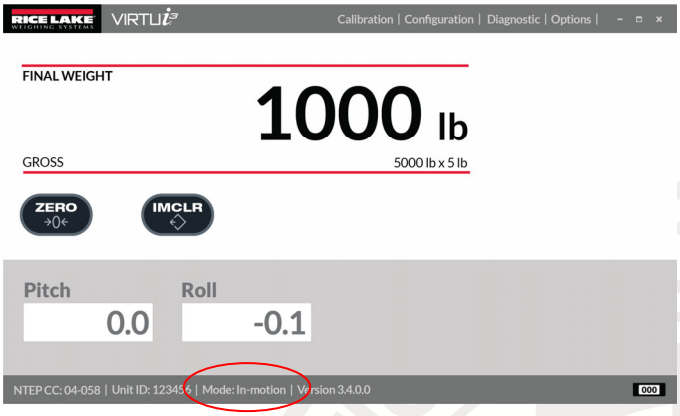


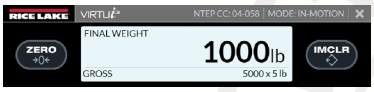
Rice Lake Weighing Systems
Indicating Element / VIRTUi, VIRTUi2, & VIRTUi3

Rice Lake Weighing Systems
Indicating Element / VIRTUi, VIRTUi2, & VIRTUi3

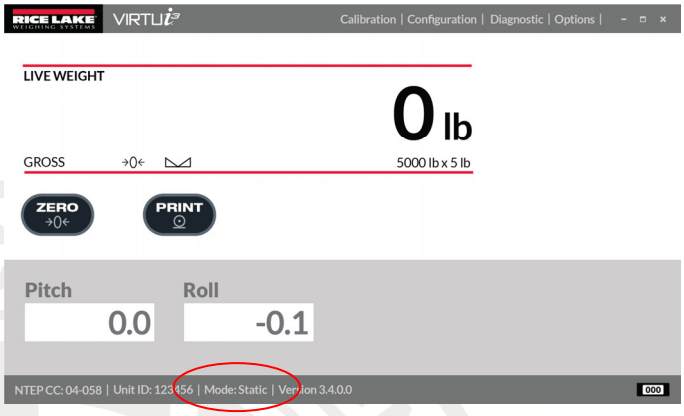
Model VIRTUi3

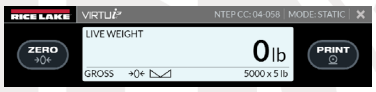
In-motion weighing





Static weighing





Operating system: Android 4.4 (KitKat) display