



NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

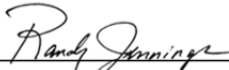
**For:**  
Weighing/Load Receiving Element  
Floor Scale, Load Cell Electronic  
Model: 684P and GP-400  
 $n_{max}$ : 3 000 (Model 684P) and 2 000 (Model GP-400)  
Capacity: (see below)  
Platform: 18" x 14"  
Accuracy Class: III

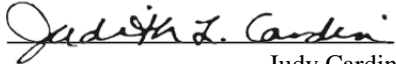
**\*Submitted By: Contact Info. Updated: December 09**  
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### Standard Features and Options

Model	Capacity	$e_{min}$	Temperature Range
684P	600 lb	0.2 lb	2 to 32 °C
GP-400	400 lb	0.2 lb	-10 to 40 °C
GP-400	200 kg	0.1 kg	-10 to 40 °C

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.

  
Randy Jennings  
Chairman, NCWM, Inc.

  
Judith Cardin  
Chairman, National Type Evaluation Program Committee  
Issued: December 8, 2009

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## Cardinal / Detecto Scale Manufacturing Company

Load Cell / 684P and GP-400

**Application:** The load receiving element may be used for general weighing purposes when interfaced with a compatible and certified indicating element.

**Identification:** The identification badge is an engraved metal plate, located on the left side of the device.

**Sealing:** A wire security seal may be attached to two screws located underneath the device.

**Operation:** The device has a level indicator attached to the top of the platform near the handle.

**Test Conditions:** The emphasis of this evaluation was on the device design, operation, and compliance with influence factor requirements. The load receiving element was interfaced with a Cardinal Scale Model DR20LC indicator for the purpose of this evaluation. The device was evaluated as a 600 x 0.2 lb scale and as a 400 x 0.2 lb scale.

Several increasing/decreasing load tests and shift tests were performed. The 684P model was tested over a temperature range of 2 to 32 °C (35.6 to 89.6 °F). The GP-400 model was tested over a temperature range of -10 to 40 °C (14 to 104 °F). A load of approximately one-half capacity was applied to the scale 100 000 times. The scale was tested periodically during this time.

**Evaluated By:** A.P.Buie (MD)

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 1994. NCWM, Publication 14: Weighing Devices, 1994.

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