

United States Department of Commerce
National Institute of Standards and Technology

***Demonstrated
Areas of Proficiency**

Mass

Echelon I
500 kg - 1 mg
Echelon II
50 kg - 1 mg
1,000 lb - 0.001 lb
4 oz - 0.03125 oz
Echelon III
500 kg - 1 mg
2,500 lb - 0.001 lb
8 oz - 0.015625 oz
Railroad Test Cars
110,000 lb - 80,000 lb
Weight Carts
10,000 lb - 2,000 lb
Wheel Load Weighers
20,000 lb - 2,000 lb

Volume

Gravimetric, I
20 L - 1 mL
100 gal - 0.25 qt
Volume transfer, II
1,500 gal - 5 gal
100 gal - 25 gal LPG

Length

Tapes
200 ft - 1 ft

Temperature

II 100 °C - 20 °C

~ Certificate of Measurement Traceability ~
for

Minnesota

**a participant in the NIST Weights and Measures
Measurement Assurance Program for the Year(s)**

2011 -2012

The State standards are traceable to NIST and the laboratory has demonstrated* measurement proficiency through training and interlaboratory comparisons compliant to NIST HB 143:2007 (ISO/IEC 17025:2005).



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Title

January 1, 2011 to December 31, 2012
Effective Date

