

**United States Department of Commerce
National Institute of Standards and Technology**

***Demonstrated
Areas of Proficiency**

Mass

Echelon I 30 kg - 1 mg
 50 lb - 0.001 lb
Echelon II 250 kg - 1 mg
 2,500 lb - 0.001 lb
 8 oz - 0.03125 oz
Echelon III 500 kg - 1 mg
 6,000 lb - 0.001 lb
 8 oz - 0.03125 oz
Weight Carts ≤ 6,000 lb
Lottery Balls

Volume

Gravimetric, I
 20 L - 100 mL
 100 gal - 1 gill
 Small Volume Prover (SVP)
 30 gal - 15 gal
Volume transfer, I
 20 L, 7,500 gal - 1 gal
Volume transfer, II (Field)
 5 gal - 1 gal

Length

Steel tapes
 30 m - 0.1 m, 112 ft - 1 ft
Rigid rules
 1 m - 10 mm, 72 in - 1 in
Lottery Balls

Temperature

Echelon III, IV
LIG 230 °C - -30 °C, 446 °F - -22 °F
PRT 230 °C - -30 °C, 446 °F - -22 °F

Grain Moisture

13 % - 23 %

~ Certificate of Measurement Traceability ~
for

North Carolina

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

2010

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

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Effective Date

