10	0 to 90	90.01175	0.00017
10	0 to 100	100.01310	0.00018

The following measurements were used to calculate the AE value:

Tension (kg)	Interval (meters)	Length (meters)	Uncertainty (meters)
10	40 to 100	60.00776	0.00012
20	40 to 100	60.02946	0.00012

The average value of *AE* for the tape is 271000 Newtons with an expanded uncertainty $U\,(k = 2)$ of 5400 Newtons, where *AE* is the product of the tape cross-sectional area and its Young's modulus of elasticity.

The average mass per unit length of the tape is 0.01532 kg/m with an expanded uncertainty $U\,(k = 2)$ of 0.00006 kg/m.

The assumed coefficient of thermal expansion of the tape is 0.0000115 $°C^{-1}$ (0.0000064 $°F^{-1}$).

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Measurements were made by Chris Blackburn.

For the Director,
National Institute of Standards and Technology

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Order No: EMAIL
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