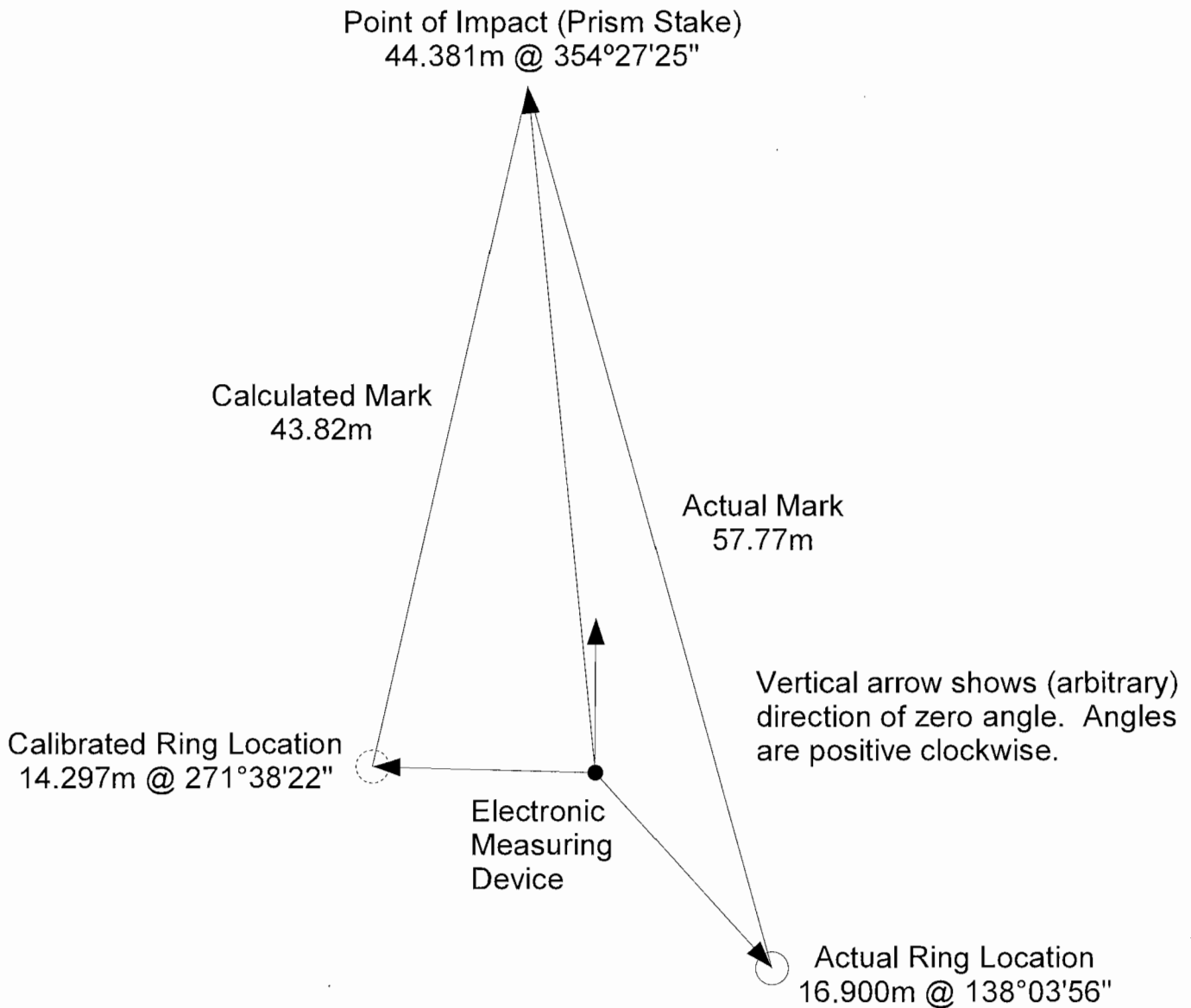


# Example of Effect of Invalid Calibration Data on Electronic Measurements in Throws

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Applying the law of cosines gives:

$$\text{Calculated: } \sqrt{14.297^2 + 44.381^2 - 2 \cdot 14.297 \cdot 44.381 \cdot \cos(354^\circ 27' 25'' - 271^\circ 38' 22'')} - 1.07 = 43.82$$

$$\text{Actual: } \sqrt{16.900^2 + 44.381^2 - 2 \cdot 16.900 \cdot 44.381 \cdot \cos(354^\circ 27' 25'' - 138^\circ 03' 56'')} - 1.07 = 57.77$$

Note: 1.07m is used here for the ring radius instead of the FieldLynx default setting (version 2.42) of 1.06m since the IAAF hammer ring diameter is  $2.135 \pm 0.005\text{m}$  for a radius of 1.065m to 1.070m.