**Ph201 lab**

**Conservation of Momentum Lab Data**

Length of string, Lo: 92.4 cm

Radius of small circle , R: 12.3 cm

Diameter of Bob, D: 1.13 cm

Mass of Bob, Mb: 34.3 g

In the experimental trial as seen on the video we found that the bob just barely made it through the top photogate (or the tension at position 2 was zero) when the initial height, hoexperimental, measured up from the bob hanging freely on the string (or position 3 being h = 0) was .354m.

We then released the bob from this height 5 times and recorded the time at the lower and upper photogates.

**Trial 1** Lower photogate time: .00422s Upper photogate time: .00859 s

**Trial 2** Lower photogate time: .00381s Upper photogate time: .00820 s

**Trial 3** Lower photogate time: .00410s Upper photogate time: .00844 s

**Trial 4** Lower photogate time: .00435s Upper photogate time: .00864 s

**Trial 5** Lower photogate time: .00462s Upper photogate time: .00823 s