

Physics 112 Laboratory Report

Deflection of Electrons

Name _____

Date _____

Lab Partner _____

Tabulate your data below, or attach an equivalent *clearly labeled* spread sheet. Be careful to record only a reasonable number of significant figures.

Electric deflection data

Maximum B+ _____

Minimum B+ _____

V_d	D_E

V_d	D_E

Attach your plot of D_E vs V_d for both values of B+ voltage. Do a linear fit to each data set and obtain the slopes, with units.

s_E for maximum B+ _____

s_E for minimum B+ _____

Magnetic deflection data

Maximum B+ _____

Minimum B+ _____

I	D_B

I	D_B

Attach your plot of D_B vs I for both values of B+ voltage. Do a linear fit to each data set and obtain the slopes, with units.

s_B for maximum B+ _____

s_B for minimum B+ _____

Analysis

Use your data to find values of u and e/m , including units. Are your results consistent with expectations?