

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Partner: \_\_\_\_\_

Basic Constants

Analysis

What did you plot?

\_\_\_\_\_ Vs. \_\_\_\_\_

Record your "linest" results:

Slope: \_\_\_\_\_  $\pm$  \_\_\_\_\_

Intercept: \_\_\_\_\_  $\pm$  \_\_\_\_\_

$W$	cm
$H$	cm
$R$	$\Omega$
$P_{\text{bulb}}$	W
$V_{\text{back}}$	mV
$D_{\text{aperture}}$	cm
$D_{\text{bulb}}$	cm
$L_{\text{track}}$	cm
Screen position	cm
Screen to bulb	cm
$x_{\text{source}}$	cm

Efficiency Calculations

- Why do you think your result for  $n$  wasn't exactly 2.0?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

$\Omega_{\text{aperture}}$	
$P_{\text{aperture}}$	W
$r$	cm
$\Omega_{\text{PV cell}}$	
$P_{\text{into PV cell}}$	$\mu\text{W}$
$P_{\text{into resistor}}$	$\mu\text{W}$
$\eta$	
$\eta$	%