Laboratory Project 1a: LED Voltage vs Current, Pre-Amps

Laboratory Notebook Contents and Grading

10 Communication
1  Work recorded in notebook (rather than pasted in)
4  Student's work Reproducible from notebook
1  Written in Ink
1  Student Signed every page
1  Student Dated every page
2  TA Signature for lab session

Lab 1.a

2 IV. CONSTRUCTION OF LED POWER INDICATORS
1  Explanation of task (built power indicators)
1  Diagram of circuit from Fig. 3

8 V. RESISTOR AND LED CURRENTS
A. Measurements of Voltages
1  Explanation of task (measured voltages for R and LED)
1  Table II filled in with measured values
B. Calculation of Current in Resistor and LED
1  Explanation of task (Used Ohm's law to calculate $i_R = i_{LED}$)
1  Table III filled in with measured values
C. Plot of Current versus Voltage in LED
1  Explanation of task (Commented on plot of LED current versus voltage)
3  Drew accurate plot of LED current vs voltage with all labels

5 VI. CONSTRUCTION AND TESTING OF PRE-AMPS
A. Construction
1  Explanation of task (constructed pre-amps circuits on breadboard)
1  Schematic of pre-amps
1  Explanation of testing (1 V 1 kHz sinusoid in, oscilloscope measure output)
B. Drawing of Waveforms
2  Careful drawing of oscilloscope screen

/25 Total