Laboratory Project 1a: LED Voltage vs Current
Report Contents and Grading

8 ***Communication***
- – IEEE single column, double spaced format (–5 pts if not used)
- 1 Style (written in the style of article, rather than stand-alone figs. and tables)
- 1 English (grammar, punctuation, and etc.)
- 1 Clarity (purpose of each section clearly explained)
- 1 Succinctness and precise wording (detailed information in as few words as possible)
- 1 Organization (ease of locating figures/code/equations/etc.)
- 1 Section numbers and headings (use section numbers shown below)
- 1 Equations explained (at least one sentence between equations)
- 1 Figures complete (every figure numbered, captioned, and referred to in text)

1 ***Abstract*** (succinct summary of report, including technical results as appropriate)

2 **I. INTRODUCTION**
- 1 Motivation for lab [explore LED *i* vs *v*]
- 1 State report organization

1 **II. METHODS** (Construction of LED Power Indicators)
- 1 Description of LED circuits, (including Fig. 3a of Lab 1a or similar)

7 **III. LED POWER INDICATOR CIRCUITS**

A. *Measurement of voltages*
- 1 Description of LED circuits, (including Fig. 3b of Lab 1a or similar)
- 1 Table I: Parts List for LED Circuits
- 1 Table II: +12V Power Indicator Circuit Voltages

B. *Calculation of Current in Resistor and LED*
- 1 Description of how LED current calculated using Ohm's law
- 1 Table III: LED Current and Voltage

C. *Plot of Current versus Voltage in LED*
- 1 Discussion of plot and its nonlinear shape versus Ohm's law
- 1 Accurate plot of LED current vs voltage with all labels (use computer to draw)

1 **CONCLUSION** (summary of key results, including numerical values as appropriate)

/20 Total