Lab 5

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1. The frequency created by oscillating the potentiometer lines up with the LED period very close, with only an error of 1/10th of a second. For how bad the data is (looking at the voltage and spectral density plot), this is surprisingly close. The secondary frequency of the LED of about ~3 Hz also lines up quite well between the two along with the first one at about 1 Hz.

Chart

Description automatically generated



A picture containing diagram

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1. The frequency given from the FFT to the peak-to-peak measurements is about 2% different, which can be negligible. The FFT frequency analysis is much more important when there is more than one signal, as the peak-to-peak signal analysis only works because it only has one frequency

Chart, histogram

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Chart, histogram

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Chart, line chart

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Text

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