

5 Report

Write a detailed report including oscilloscope plots (as you see fit) and the 4 tables described in the previous section. Plot the data from Tables I-IV and describe what is happening.

Questions to answer

- Explain the differences observed when operating the DC motor with and without IR compensation.
- How does the voltage waveform applied to the dynamometer change when the load_duty is changed? When load_duty is set to 35% what is the average voltage applied to the dynamometer? Hint: You will need to read DC voltage and the duty cycle of the applied voltage from the oscilloscope.
- How does the voltage waveform applied to the armature change when the IR compensation is on?