

sdmay23-29: Building blocks and sub-circuits with magnetic field generators

Week 8 Report

November 3 – November 9

Team MembersAndrew Murphy — *Electrical circuit tester*William Nichols — *Circuit and Optical Design*Michael Lopez — *MATLAB circuit*Steven Huynh — *Electrical circuit tester*Umair Sarwar — *Comsol deisgn***Summary of Progress this Report**

For this week, our group was tasked with looking into different types of inductors, continuing to expand our simulink simulations, and improving the current waveform produced by our MFG circuit.

Pending Issues

We have no pending issues from last week's report. Our client wants us to fully understand the Comsol simulations as well as having us become more proficient in the MATLAB simulink and circuit designs.

Plans for Upcoming Reporting Period

Next week, we plan on continuing to improve on the MFG circuit design as well as improving on the design in our MATLAB simulink simulation and Comsol simulation.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Andrew Murphy	This week, Andrew continued to improve on the work on the circuit we've built on the breadboard from 2 weeks prior. Using the components from our lab kit,	8	90
William Nichols	This week, William continues to primarily focus on Simulink and Comsol. Seeing if Umair or Michael made a mistake in their design and giving his own input on what works and what doesn't.	7	75
Michael Lopez	This week, Michael continues to primarily focus on Simulink. Michael came up with values for each component in the Multisim circuit and attempted to calculate the rise time based on the values through MATLAB	6	84
Steven Huynh	This week, Steven continued to aid Andrew	5	80

	on improving the work on the circuit we've built on the breadboard from 2 weeks prior. Using the components from our lab kit		
Umair Sarwar	This week, Umair attempted to create a helmholtz coil in comsol. This helmholtz coil would be extremely helpful in creating a magnetic field for our circuit once it strats to work on Comsol	3	70

Gitlab Activity SummaryNothing to report.
