

Lab3 Simulation and Data Tables

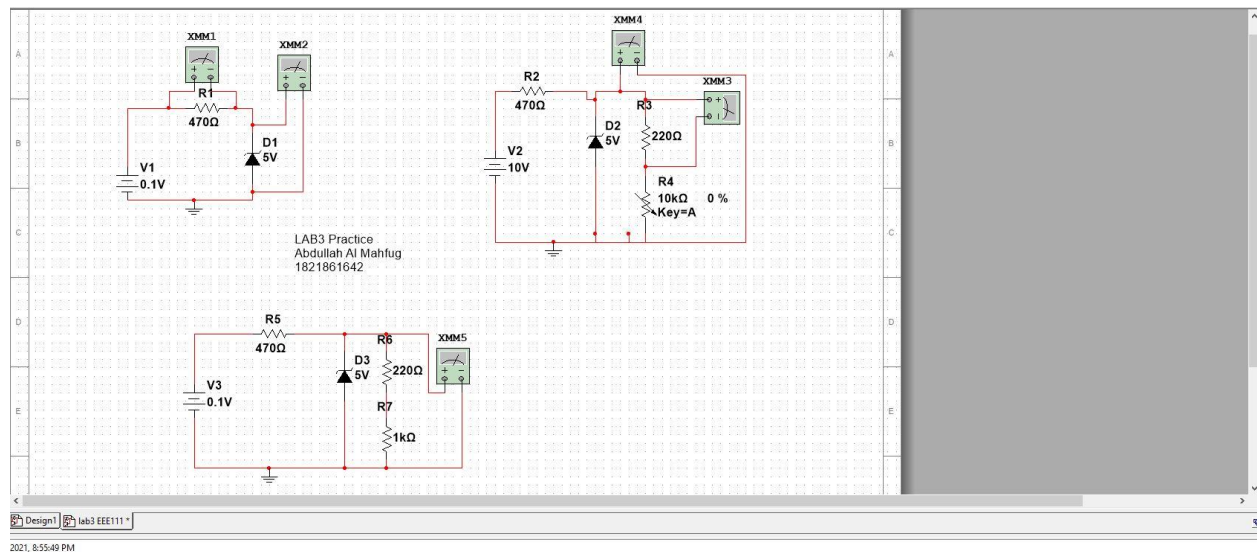


Table 3.1: Data for I - V characteristics:

V (volts)	V_R (volts)	V_Z (volts)	$I_Z = V_R / R$ (ma)
0.1	0.000009447	99.991×10^{-3}	0.00002.01
0.3	0.000028339	299.972×10^{-3}	0.00006029574468
0.5	0.000047231	499.953×10^{-3}	0.000100491489
0.7	0.000066123	699.934×10^{-3}	0.0001.4068723
1.0	0.000094462	999.906×10^{-3}	0.000200982
2	0.000188923	2	0.0004019
3	0.000283384	3	0.0006029

4	0.000377845	4	0.00080392
5	0.000092521	4.907	0.00019685
6	1.044	4.956	2.22127659
7	2.031	4.969V	4.3212
8	3.023	4.977V	6.43191
9	4.017	4.983V	8.54680
10.0	5.013	4.987V	10.6659

Table 3.2: Data for Load Regulation:

POT R(k Ω)	V ₂₂₀ (mV)	V _L (volts)	I _L (Amp)= V ₂₂₀ /220
0%	3188	3.189	0.0144909091
10%	897.643	4.978	0.004080195
20%	493.783	4.983	0.002244468
30%	340.542	4.984	0.001547918
40%	259.886	4.985	0.0011813
50%	210.119	4.986	0.000955086
60%	176.349	4.986	0.000801586
70%	151.931	4.986	0.000690595

Table 3.3: Data for Line Regulation.

V (volts)	V _L (volts)
1	0.721844 V
3	2.166 V
6	4.331V

8	4.958 V
9	4.97V
10	4.978V
11	4.983V
12	4.988V