ELECENG 2FL3 ASSIGNMENT 7

Raeed Hassan
hassam41
McMaster University

October 26, 2020

The variation I had was Version A variation 0. The following are the analytical expressions for the electric field vector $\mathbf{E}(\rho)$ and potential $\mathrm{V}(\rho)$:

$$\vec{E}(\rho) = \frac{\rho_l}{2\pi\epsilon r}\hat{\rho} = \frac{\rho_s \times 2\pi\rho_1}{2\pi\epsilon\rho}\hat{\rho} = \frac{\rho_s\rho_1}{\epsilon\rho}\hat{\rho}\ ,\ V/m$$

$$V(\rho) = \frac{\rho_s\rho_1}{\epsilon}\ln\left(\frac{\rho_2}{\rho}\right)\ ,\ V$$