

The measured resistivity at the end is on the order of  $10^{-6}$ , quite a small resistivity. The impurity concentration is quite high, around  $10^{19}[\frac{donors}{cm^3}]$ . The high impurity concentration explains why the resistivity is so low. When a large number of donors are present in silicon, more carrier electrons are generated in the conduction band. Thus, for the same potential difference, more charges can move around, and thus a higher current is possible. Therefore, the resistivity is expected to be low. However, a more thorough analysis is required before the impurity concentration figure is finalized. More data points and a linear regression analysis is required to determine a more accurate value for the resistivity and therefore the carrier concentration.