467

$$\begin{split} V &= k_0 \frac{Q}{r} \text{ LD.} \\ V_{50} &= 9.0 \times 10^9 \cdot \frac{3.0 \times 10^{-6}}{0.50} \\ &= 7.2 \times 10^4 \text{ V} \\ V_{60} &= 9.0 \times 10^9 \cdot \frac{3.0 \times 10^{-6}}{0.60} \\ &= 6.0 \times 10^4 \text{ V} \\ E &= \frac{V}{d} \text{ LD.} \\ E &= \frac{7.2 \times 10^4 - 6.0 \times 10^4}{0.60 - 0.50} \\ &= 1.2 \times 10^5 \text{ V} \text{ / m} \end{split}$$