$$\frac{Q}{Q_0} = 1 - \frac{2\beta_0}{\beta_1} J_1(\beta_1)$$

$\beta_1 = 0.3438$ From table B.4 $\Rightarrow J_1(0.3438) = 0.1692$

$$\frac{Q}{Q_0} = 1 - \frac{2 \times 0.3720}{0.3438} \times 0.1692 = 0.634$$

$$\frac{Q/L}{Q_0/L} = 0.634$$

$$Q/L = 0.634 \times 6.203 \times 10^5 = 3.93 \times 10^5 \ J/m$$