

1-cm-Dia. x 50-cm-Long Tungsten Rod: 100 kW, $k = (313+355T)/(1000+4.685T)$

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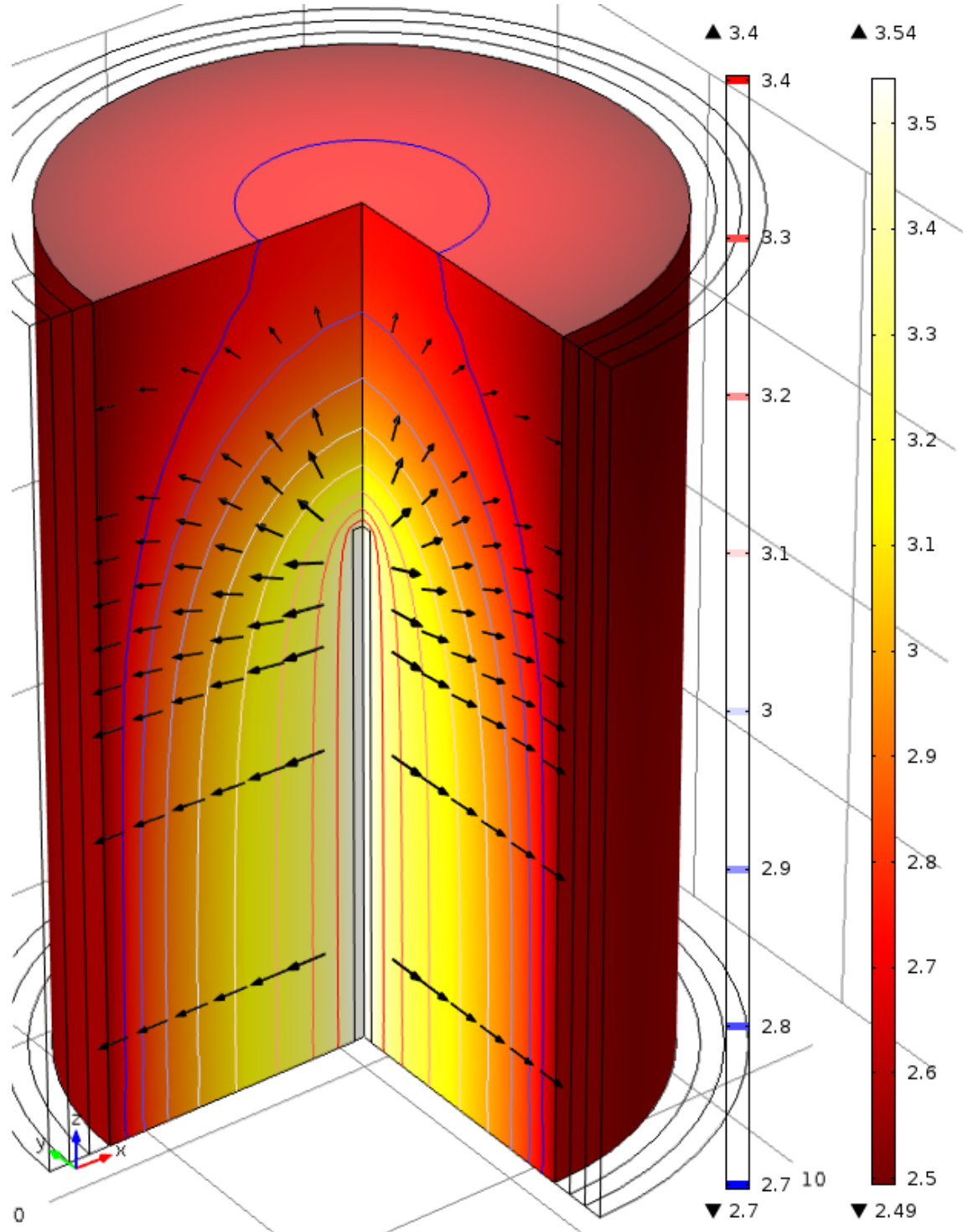


Fig. 1. $\log_{10}(T)$ of upper half of a radiation-cooled tungsten rod of 1-cm dia. and 50-cm length; uniform power-deposition density = $[100\text{kW}/39.3 \text{ cm}^3 = 2.55 \text{ kW}/\text{cm}^3$. $T_{\text{max}} = 10^{3.54} = 3,470 \text{ K}$.