3.21: Local Density of States in Omniguide Fibers

How does the density of states for an Omniguide near the cutoff frequency $\omega_c$ scale with frequency?

A. $\sqrt{\omega - \omega_c}$
B. $\Theta(\omega - \omega_c)$
C. $1/\sqrt{\omega - \omega_c}$
D. $1/(\omega - \omega_c)$
E. $(\omega - \omega_c)^2$