HW #16 Beam Design

Determine whether a W24 x 104 of A992 steel is adequate for the beam shown in Figure P5.5-14. The uniform load does not include the weight of the beam. Lateral support is provided at A, B, and C.

$P_D = 12k$
$P_L = 36k$

$w_D = 1k/ft$
$w_L = 3k/ft$

FIGURE P5.5-14