2-28. A 5-kg box lies against the slope and is rotating about the z axis with a constant angular velocity $\omega = 2.6$ rad/s . The coefficient of static friction between the block and the slope is normally distributed $\mu_s \sim N(0.5, 0.05^2)$. Assume $L = 0.5$ m and $\theta = 45°$, determine the probability that the box will not slip.

Solution: 0.6.