Niech $X \sim U[-2, 2]$
$Y = \|X\|$

$$F(y) = P(Y \leq y) = P(\|X\| \leq y) = P(-y \leq X \leq y) = P(X \leq y) - P(X \leq -y)$$

$$F_Y = F_X(y) - F_X(-y)$$