A pretzel is to be dipped in chocolate. The pretzel is in the shape of a quarter circle, consisting of a straight segment from the origin to the point (2,0), a circular arc from there to (0,2), followed by a straight segment back to the origin; all distances are in centimeters. The (linear) density of chocolate on the pretzel is given by $\lambda = 3(x^2 + y^2)$ in grams per centimeter. Find the total amount of chocolate on the pretzel.