Quantum walks are quantum counterparts of random walks and the behavior of the quantum walkers has been revealed in long-time limit theorems. The first long-time limit distribution of a two-dimensional walk was obtained in 2008 and the walker is characterized by both localization and linear diffusion [1]. On the other hand, a quantum walk presented in my talk delocalizes and its limit distribution, hence, has just a linear diffusion part. We employ two kinds of coin-flip operator and demonstrate a limit distribution for each operator. The limit density functions show features different from the one obtained in the past study. The result in my presentation is based on [2].