This technical note considers an n-link revolute planar robot with all the links moving in the same vertical plane and having a single actuator. An encoder attached to the actuator measures the link or joint angle, which represents the single actuated degree of freedom (DOF) of the robot. The linear controllability and observability of the robot around the upright equilibrium point, where all the links are in the upright position, are investigated. New properties of the mechanical parameters are extracted to demonstrate that the robot is linearly controllable and observable, regardless of the mechanical parameters, when the first or last link, or the last joint, is active and the corresponding link or joint angle is measured. For the case where any of the n - 2 links other than the first or last is active and the corresponding link angle is measured, a necessary and sufficient condition is established that ensures that the robot is linearly controllable and observable. For this case, an illustrative example shows that there always exists a set of mechanical parameters that renders the robot linearly uncontrollable and unobservable. This technical note provides insights into the linear controllability and observability of an n-link planar robot for different actuator-sensor configurations.