

ABSTRACT

Provided is a sunlight lighting system used in a greenhouse or a plant factory. The sunlight lighting system converts sunlight into light with a stable illumination direction and a controllable illumination intensity by means of a combination of a controller, a light condenser, a main driving mechanism and an illuminator (31), so that the sunlight lighting system meets lighting requirements of high-density stereoscopic cultivation frames (81). A supporting greenhouse (92) is further comprised, where a facade or a top is provided with a light through hole (99). A main optical axis of the sunlight lighting system passes through the light through hole (99). A supporting lighting method is further comprised, which can obtain a better lighting effect with fewer steps.