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ABSTRACT

A linear driving module includes: a control circuit, a dimming module, and a low-dropout regulator. The control circuit generates switch signals in response to a change in a pulsed DC voltage. The dimming module receives the pulsed DC voltage. The dimming module includes dimming units. Light-emitting diode units in the dimming units are in a light-on state or a light-off state. The low-dropout regulator receives an input voltage from the dimming unit, and converts the input voltage into a regulated voltage. The input voltage varies with the number of light-emitting diode units in the light-on state. The input voltage is lower than the pulsed DC voltage, and the regulated voltage is lower than the input voltage.

