

ABSTRACT

A white LED lighting device driven by a pulse current is provided, which consists of blue, violet or ultraviolet LED chips, blue afterglow luminescence materials A and yellow luminescence materials B. Wherein the weight ratio of the blue afterglow luminescence materials A to the yellow luminescence materials B is 10-70wt%: 30-90wt%. The white LED lighting device drives the LED chips with a pulse current having a frequency of not less than 50 Hz. Because of using the afterglow luminescence materials, the light can be sustained when an excitation light source disappears, thereby eliminating the influence of LED light output fluctuation caused by current variation on the illumination. At the same time, the pulse current can keep the LED chips being at an intermittent work state, so as to overcome the problem of chip heating.