ABSTRACT

An alternating current (AC) white LED lighting device and a method for manufacturing the same are provided. The AC white LED lighting device 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%. Because of using afterglow luminescence materials, the light will be sustained when an excitation light source disappears, which can eliminate the influence of LED chips light output variation due to the AC fluctuation on the lighting device. And the problem of the heating of the chips also can be overcome. At the same time, the influence of temperature quenching effect and direction change of the AC current on the AC white LED lighting device is eliminated.