

Light supplement module for bar code reading and bar code reading device

Abstract

The present application provides a light supplementing module for barcode reading and a barcode reading device. Based on the present disclosure, light supplementing spots formed by polarized imaging of the light supplementing source by each of polarizing components in the light supplementing module by means of the polarizing lens converge towards a designated field of view area in a camera field of view of the code reading camera at a target imaging distance, and overlap to form an overlapping spot of which the brightness uniformity is larger than or equal to a preset uniformity threshold, wherein, the designated field of view area of the code reading camera can fall within a spot range of the overlapping spot, and a contour of the overlapping spot can converge towards a boundary of the designated field of view. Thus, beams generated by light supplementing sources can be uniformed based on polarization and convergence of the lens, so that light energy for light supplementing uniformly converges in the designated field of view area. As a result, compared to uniformed based on light diffusion, improvement of utilization rate of the light energy for light supplementing is facilitated.

Fig. 1