

Factors that affect the LED color

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With the dramatic development of the Internet and the wireless communication technology, information becomes easily accessible to everyone and thereby the personal information-related electronic products, such as notebooks, mobile phones, digital cameras, and personal digital assistants, are rapidly developed and grown. Going with the ascending trend of the market on the Internet digital information, so at this stage LED lightsource is an indispensable part of the LCD module. Consumer to LCD display requirements more and more high in the color, there are many factors affecting the LED color. This article only introduces LED by the current factors affecting color deviation. Through the experiment we can conclude some factors influencing the LED color, Experiments using red light, blue light, green light LED. These conclusions can provide reference for subsequent LCM design.

Current & wavelength:

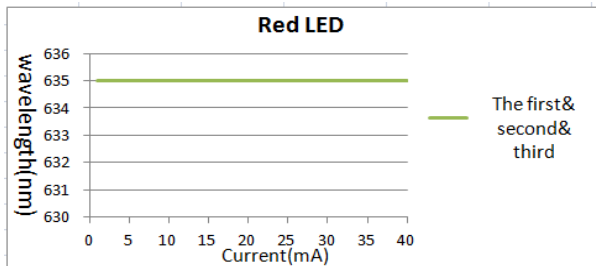


Fig1

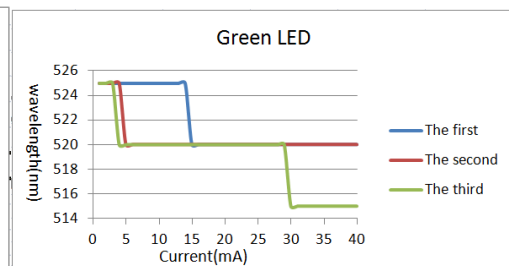


Fig2

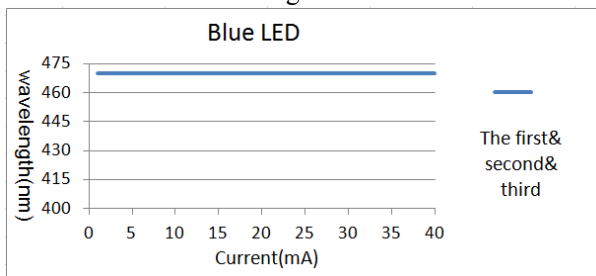


Fig3

Conclusions:

R\G\B Different color LED wavelengths are influenced by electric current, among them, the influence on the red and blue LED is not obvious, Green LED effect is more noticeable, so in wavelength variation at the same time, the human eye is sensitive to green the most, then cause the differences on the vision.

So in LCM design, If the Light bar circuit design is not reasonable, can cause uneven distribution of the current or the heat unevenly, Color deviation problem is easy to occur.