

DISPLAY DEVICE AND DISPLAY UNIT USING THE SAME

ABSTRACT

Provided are a display device and a display unit having higher light extraction efficiency. An optical distance L_1 between a maximum light-emitting position of a light-emitting layer and a first end portion satisfies $L_1 = tL_1 + a_1$ and $(2tL_1)/\lambda = -\Phi_1/(2\pi) + m_1$. An optical distance L_2 between the maximum light-emitting position and a second end portion satisfies $L_2 = tL_2 + a_2$ and $(2tL_2)/\lambda = -\Phi_2/(2\pi) + m_2$. In the formulas, tL_1 and tL_2 represent a theoretical optical distance between the first end portion and the maximum light-emitting position and a theoretical optical distance between the second end portion and the maximum light-emitting position, respectively, a_1 and a_2 represent correction amounts based upon a light-emitting distribution in the light-emitting layer, λ represents a peak wavelength of the spectrum of light desired to be extracted, Φ_1 and Φ_2 represent a phase shift of reflected light generated in the first end portion and a phase shift of reflected light generated in the second end portion, respectively, and each of m_1 and m_2 is 0 or an integer.

FIG. 2