

LABJND colour difference formula of CIE 230:2019

Modifications with normalization to Y_u of surround

$$dY = A_1 + A_2 Y \quad \text{error } 0,0044 \quad A_1 = 0,0170, A_2 = 0,0058 \quad [1]$$

$$= A_1 + A_{2u} (Y/Y_u) \quad A_1 = 0,0170, A_{2u} = 0,1004 = A_2 Y_u \quad [2]$$

$$dY = A_1 + A_2 Y^{A_3} \quad \text{error } 0,0019 \quad A_1 = 0,0258, A_2 = 0,0036, A_3 = 1,087 \quad [3]$$

$$= A_1 + A_{2u} (Y/Y_u)^{A_3} \quad A_1 = 0,0258, A_{2u} = 0,0823, A_3 = 1,087 \quad [4]$$

$$dY = A_1 [1 + A_2 Y] \quad \text{error } 0,0044 \quad A_1 = 0,0170, A_2 = 0,3343 \quad [5]$$

$$= A_1 [1 + A_{2u} (Y/Y_u)] \quad A_1 = 0,0170, A_{2u} = 5,931 = A_2 Y_u \quad [6]$$

$$dY = A_1 [1 + A_2 Y]^{A_3} \quad \text{error } 0,0018 \quad A_1 = 0,0251, A_2 = 0,1566, A_3 = 1,107 \quad [7]$$

$$= A_1 [1 + A_{2u} (Y/Y_u)]^{A_3} \quad A_1 = 0,0251, A_{2u} = 2,778, A_3 = 1,107 \quad [8]$$