

LABJND colour-difference formula of CIE 230:2019

Modifications with normalization to Y_u of surround

$$dY = [A_1 + A_2 Y]^{A_3} \quad \text{error } 0,0018 \quad A_1 = 0,0358, A_2 = 0,00561, A_3 = 1,107 \quad [9d]$$

$$= [A_1 + A_{2u} (Y/Y_u)]^{A_3} \quad A_1 = 0,0358, A_{2u} = 0,0995, A_3 = 1,107 \quad [10d]$$

$$\int \frac{dY}{(A_1 + A_2 Y)^{A_3}} = \frac{[A_1 + A_2 Y]^{(A_3+1)}}{A_2(A_3+1)} = F^*(Y) \quad A_3 \neq 1 \quad [9i]$$

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

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

$$\frac{1}{A_1} \int \frac{dY}{[1 + A_2 Y]^{A_3}} = \frac{1}{A_1} \frac{[1 + A_2 Y]^{(A_3+1)}}{A_2(A_3+1)} = F^*(Y) \quad A_3 \neq 1 \quad [7i]$$