

LABJND colour difference formula of CIE 230:2019

Modifications with normalization to Y_u of surround

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

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

$$\int \frac{dY_r}{A_1 + A_2 Y_r} = \frac{1}{A_2} \ln | A_1 + A_2 Y_r | = F^*(Y_r) \quad (A_3=1) \quad [2i]$$

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

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

$$\frac{1}{A_1} \int \frac{dY_r}{1 + A_2 Y_r} = \frac{1}{A_1 A_2} \ln | 1 + A_2 Y_r | = F^*(Y_r) \quad (A_3=1) \quad [6i]$$