

$\log(\Delta Y)$

LABJNDu3

tristimulus value difference

$$Y_{nc} = L^* w_{RGB} = 100, 52, 87, 31$$

ΔY

1-10

$$L^*_{LABJNDu3} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu3} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

$$dY = A_{0n}(A_{1n} + A_{2n}Y) = A_{0n}(A_{1n} + A_{2u}x) \quad x = Y/Y_u$$

0-1 $A_{0n,D65} = 1,5, A_{0n,A} = 1,0$, see CIE 230:2019

$$L^*_u = 496, dY_u = 0,13, dY_u/Y_u = 0,0072$$

-1-0,1 $\log(dY) = 0,13, m_u = 0,80$

$$dY_{90} = 0,55, A_{0n} = 1,5, A_{2n} = 0,00699, \rho_x = 0,67$$

$$dY_{18} = 0,13, A_{1n} = 0,0017, A_{2n} = 0,0038$$

$$dY_{3,6} = 0,04, Y_u = 18, dY_u = 0,13$$

application range

-2-1 0 1 10 100 $x_N = 0,2$ 1 $x_W = 5$ 2 $\log(Y)$