

$\log(\Delta Y)$

LABJNDu3

tristimulus value difference

$Y_{nc}=L^*_{WRGB} \text{nc}=100, 52, 87, 31$

$\Delta Y$

10

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

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

$$dY = A_{0n}(A_{1n} + A_{2n}Y) = A_{0n}(A_{1n} + A_{2u}x), \text{ see CIE 230:2019}$$

0

$$dY_{90} = 0,24, A_{0n} = 0,6666, A_{2u} = 0,0699, c_x = 0,67$$

$$dY_{18} = 0,05, A_{1n} = 0,011, A_{2n} = 0,0038$$

$$dY_{3,6} = 0,01, Y_u = 18, dY_u = 0,05$$

-1

$$L^*_{u} = 1116, dY_u = 0,05, dY_u/Y_u = 0,0030$$

$$\log(dY) = 0,05, m_u = 0,85$$

application range

-2

0,1

1

10

$x_u = 1$

100

-1

0

1

$x_W = 5$

2

$x_N = 0,2$

$\log(Y)$