

$\log(\Delta Y)$

LABJNDu1

tristimulus value difference

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

$\Delta Y$

1-10

$$L^*_{LABJNDu1} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu1} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

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

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

$$L^*_u = 332, dY_u = 0,18, dY_u/Y_u = 0,0101$$

-1-0,1  $\log(dY) = 0,18, m_u = 0,85$

$$dY_{90} = 0,80, A_{0n} = 1,5, A_{2n} = 0,1044, c_x = 1,00$$

$$dY_{18} = 0,18, A_{1n} = 0,517, A_{2n} = 0,0058$$

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

application range

-2

0,1

1

10

100

$y$

-2

-1

0

$x_N = 0,2$

1

$x_W = 5$

2

$\log(Y)$