

$\log(\Delta Y)$

LABJNDu4

tristimulus value difference

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

ΔY
1-10

$$L^*_{LABJNDu4} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu4} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

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

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

-1-0,1

$$L^*_{u/Y_{98}} = 0,22, A_{1n} = 0,8307, A_{2n} = 0,0024$$

$$dY_{3,6} = 0,01, Y_u = 18, dY_u = 0,0028$$

$$\log(\Delta Y) = 0,05, x_N = 0,2, x_W = 5$$

$$dY_{3,6} = 0,01, Y_u = 18, dY_u = 0,0028$$

application range

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