

$\log(L^*)$

LABJNDu0 standard lightness L^*

$$Y_{nc} = L^*_{wRGBnc} = 100, 52, 87, 31$$

L^*

4 10000

$$L^*_{LABJNDu0} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu0} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

$$L^*_{N(3,6)} = 219, L^*_u(18) = 498, L^*_{w(90)} = 776$$

3 1000

$$\log[L^*/L^*_u] = 0, m_u = 0,33$$

$$L^*_u = 49, L^*_u = 498$$

2 100

$$L^*_{90} = 775,82, A_{0n} = 1, A_{2u} = 0,1044, c_x = 1,00$$

$$L^*_{18} = 498,34, A_{1n} = 0,17, A_{2n} = 0,0058$$

$$L^*_{3,6} = 219,17, L^*_u = 498,34, Y_u = 18$$

application
range

1

0,1

1

10

100

Y

-2

-1

0

1

2

$\log(Y)$