

l^* LABJNDu4 standard lightness l^*

$$Y_{nc} = Y_{WRGBnc} = 100, 21, 72, 7$$

 l^*

4 10000

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

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

$$l^*_N(3,6) = 146, l^*_u(18) = 332, l^*_{W(90)} = 517$$

3 1000

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

$$L^*_u = 49, l^*_u = 332$$

2 100

$$l^*_{90} = 517,21, A_{0n} = 1,5, A_{2u} = 0,1044, c_x = 0,42$$

$$l^*_{18} = 332,22, A_{1n} = 0,0007, A_{2n} = 0,0058$$

$$l^*_{3,6} = 146,11, l^*_u = 332,22, Y_u = 18$$

application
range

1

0,1

1

10

1, $x_u = 1$ 100 y

-2

-1

0

1, $x_N = 0,2$ 1, $x_W = 5$

2

 $\log(Y)$