

l^* LABJNDu3 standard lightness l^*

$$Y_{nc} = Y_W \text{RGB}_{nc} = 100, 21, 7$$

4
10000

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

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

$$l^*_N(3,6) = 218, l^*_u(18) = 496, l^*_W(90) = 772$$

3
1000

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

$$L^*_u = 49, l^*_u = 496$$

2
100

$$l^*_{90} = 771,96, A_{0n} = 1,5, A_{2u} = 0,0699, c_x = 0,67$$

$$l^*_{18} = 495,86, A_{1n} = 0,7, A_{2n} = 0,0038$$

$$l^*_{3,6} = 218,08, l^*_u = 495,86, Y_u = 18$$

application
range

1
-2

0,1

-1

1

0

10

1

100

2

$l^*_u = 1$

$l^*_W = 5$

100

2

Y

$\log(Y)$