

$\log(l^*/l_u^*)$

LABJNDu0 relative standard lightness l^*/l_u^*

$Y_{nc}=Y_W$ RGBnc=100, 21, 72, 7

l^*/l_u^*
2
100

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

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

$$l_{N(3,6)}^* = 146, l_u^*(18) = 332, l_{W(90)}^* = 517$$

1
10

$$l_{90}^*/l_u^* = 1,55, A_{0n} = 1,5, A_{2u} = 0,1044, c_x = 1,00$$

$$l_{18}^*/l_u^* = 1,00, A_{1n} = 0,017, A_{2n} = 0,0058$$

$$l_{3,6}^*/l_u^* = 0,43, l_u^* = 332,22, Y_u = 18$$

0
1

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

$$L_u^* = 49, l_u^* = 332$$

application range

0,1

1

10

100

Y

-2

-1

0

1

2

log(Y)

$x_N = 0,2$

$x_u = 1$

$x_W = 5$