

l^*/l_u^* LABJNDu4 relative standard lightness l^*/l_u^* $Y_{nc}=Y_{wRGBnc}=100, 21, 72, 7$ l^*/l_u^*

2 100

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

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

$$l_{N(3,6)}^* = 522, l_u^*(18) = 1187, l_{w(90)}^* = 1847$$

1 10

$$l_{90}^*/l_u^* = 1,55, A_{0n} = 1,0, A_{2u} = 0,0438, c_x = 0,42$$

$$l_{18}^*/l_u^* = 1,00, A_{1n} = 0,007, A_{2n} = 0,0024$$

$$l_{3,6}^*/l_u^* = 0,43, l_u^* = 1186,52, Y_u = 18$$

0 1

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

$$L_u^* = 49, l_u^* = 1187$$

application range

-1 0,1 1 10 100 $l_{x_u}^* = 1$ y

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