

$\log(l^*)$

LABJND_{u0} standard lightness l^*

$$Y_{nc} = Y_W \text{RGB}_{nc} = 100, 21, 72, 7$$

l^*

4 10000

$$l^*_{\text{LABJND}_{u0}} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$l^*_{\text{LABJND}_{u0}} = \ln(A_{1n} + A_{2n}x) / (A_{2n}A_{0n}) \quad (x = Y/Y_u)$$

$$l^*_N(3,6) = 146, l^*_u(18) = 332, l^*_W(90) = 517$$

3 1000

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

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

2 100

1

0,1

1

10

$x_u = 1$

100 Y

-2

-1

0

1

$x_W = 5$

2

$\log(Y)$

application range