

l^* LABJNDu1 standard lightness l^*

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

 l^*

600

$$l^*_{\text{LABJNDu1}} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$l^*_{\text{LABJNDu1}} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

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

400

$$l^*_u = 332,22, m_u = 264,66$$

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

200

application
range

0,1

1

10

100 Y

-2

-1

0

 $x_N = 0,2$

1

 $x_W = 5$

2

 $\log(Y)$