

$\log (L^*/L^*_u)$

CIELAB lightness L^* normalized to the background lightness L^*_u

L^*/L^*_u

2 $100L^* = s (Y/Y_u)^n - t$ ($Y_u=100, s=116, n=(1/3), t=16$) [1b]

$L^* = r (Y/Y_u)^n - t$ ($Y_u=18, r=s(Y_u/Y_u)^n = XX, X1$) [1c]

1 10

0 $\log [(L^*/L^*_u)] = 0, m_u = 0,43$

$L^*_u = 50, Y_u = 18$

0,301

-0,745

0,1

10

100

application range

-1 -2 -1 0 1 2 $\log Y$