

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

IECsRGB lightness  $L^*$  normalized to the background lightness  $L^*_u$

$L^*/L^*_u$

2 **100**  $L^* = s (Y/Y_u)^n - d$  ( $Y_n=100, Y_u=18, s=100, n=1/2, 4, d=0$ ) [1a]

$L^* = r (Y/Y_u)^n - d$  ( $r = s (Y_u/Y_n)^n = 48,94, L^*_u = r - d$ ) [1b]

$L^*/L^*_u = (Y/Y_u)^n$  [1c]

$\log(L^*/L^*_u) = n \log(Y/Y_u)$  [1d]

1 **10**  $\ln(L^*/L^*_u) = \ln(10) n \log(Y/Y_u)$  [1e]

$L^*/L^*_u = e^{\ln(10) n \log(Y/Y_u)}$  [1f]

0  $m_{nu} = n = 0,416$

$m_u = 0,416$

application range

-0,532

0,301

0,592

0,1

1

10

$Y_u=18$  100

$Y$

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