

L^*/L^*_u

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

$$L^* = s (Y/Y_n)^n - d \quad (Y_n=100, Y_u=18, s=116, n=1/3, d=16) \quad [1a]$$

$$L^* = r (Y/Y_u)^n - d \quad (r = s (Y_u/Y_n)^n = 65,49, L^*_u = r - d) \quad [1b]$$

$$L^*/L^*_u = g (Y/Y_u)^n - h \quad (g = r/(r-d) = 1,32, h = d/(r-d) = 0,32) \quad [1c]$$

3

2

1

0

$$m_{u90_4} = 0,840, f_{90} = 95, f_4 = 23$$

$$m_u = 1,170$$

application range

0,1 0,179

10 100

 $Y_u = 18$

3,647

2,000

 Y
log Y