

HAULAB lightness L^*_{80} normalized to the background lightness $L^*_{80,u}$

$$L^*_{80}/L^*_{80,u}$$

$$L^*/L^*_{80,u}$$

$$L^* = s(Y/Y_n)^n - d \quad (Y_n=100, Y_u=30, s=163,9, n=0,31, d=63,9) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 96,32, L^*_u = r - d = 32,4) \quad [1b]$$

$$L^*/L^*_u = g(Y/Y_u)^n - h \quad (g = r/(r-d) = 2,97, h = d/(r-d) = 1,97) \quad [1c]$$

3

2

1

0

-2

-1

0

1

2

log Y

$$m_{u90} = 4 = 69,837, f_{90} = 95, f_4 = 0$$

$$m_u = 1,592$$

1,024

 $\phi = 10'$
 $L_{aw} = 300 \text{ cd/m}^2$

application
range



0,1

1

10

Y_u = 18

100

Y_u = 30

1,999