

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

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

$L^* = s(Y/Y_u)^n - d$  ( $Y_n=100, Y_u=22, s=134,6, n=0,31, d=34,6$ ) [1a]  
 $L^* = r(Y/Y_u)^n - d$  ( $r = s(Y_u/Y_n)^n = 79,10, L^*_u = r - d = 44,4$ ) [1b]

Y\_curve, ij=0, Yuij=22, L\*uij=50

k=99, Ykij=100, L\*kij=99,9,  $L^*/L^*_{80,u}=1,99$

k=22, Ykij=23, L\*kij=50,7,  $L^*/L^*_{80,u}=1,01$

k=1, Ykij=2, L\*kij=5,4,  $L^*/L^*_{80,u}=0,10$

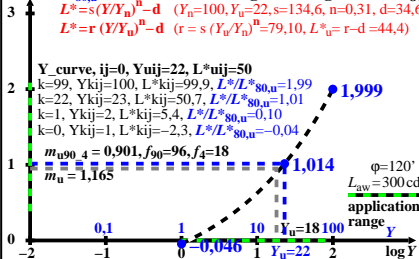
k=0, Ykij=1, L\*kij=-2,3,  $L^*/L^*_{80,u}=-0,04$

$m_{u90} = 0,901, f_{90}=96, f_4=18$

$m_u = 1,165$

$\phi=120'$   
 $L_{aw}=300 \text{ cd/m}^2$

application range



1,999

1,014

0,1

1

10

100

-0,046

$Y_u=22$

$Y_u=18$