

$\Delta Y / \Delta Y_u$ $\Delta Y / \Delta Y_u$

HAULAB tristimulus value difference

ΔY normalized to ΔY_u

6

$$L^* = s(Y/Y_n)^n - d \quad (Y_n=100, Y_u=23, s=137,2, n=0,31, d=37,2) [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 80,63, L^*_u = r-d = 43,4) \quad [1b]$$

4

 $Y_{\text{curve}}, ij=14, Y_{uij}=23, L^*_{uij}=50$ $k=99, Y_{kij}=500, L^*_{kij}=187,0, \Delta Y / \Delta Y_u = 2,74$ $k=23, Y_{kij}=424, L^*_{kij}=176,0, \Delta Y / \Delta Y_u = 1,02$ $k=1, Y_{kij}=402, L^*_{kij}=172,5, \Delta Y / \Delta Y_u = 0,18$ $k=0, Y_{kij}=401, L^*_{kij}=172,4, \Delta Y / \Delta Y_u = 0,11$

2

$$m_{u90_4} = 0,022, f_{90}=2, f_4=0$$

$$m_u = 1,558$$

0

-1

0

1

2

 $\log Y$

heu60-5a

$$Y_u = 18 \quad 100$$

$$Y_u = 23$$

 $\phi = 90^\circ$ $L_{aw} = 300 \text{ cd/m}^2$

application range