HAULAB tristimulus value difference
$\Delta Y/\Delta Y_u$ ΔY normalized to ΔY_u

$L^* = s(Y/Y_n)^n - d$ ($Y_n = 100, Y_u = 19, s = 137,2, n = 0,3^*, d = 33,1$)[1a]

$L^*_u = r(Y_u/Y_n)^n - d$ ($r = s(Y_u/Y_n)^n = 80,63, L^*_u = r - d = 47,5$) [1b]

Y_curve, ij=16, Yuij=19, L*uij=50
k=99, Ykij=200, L*kij=136,1, $\Delta Y/\Delta Y_u$=3,05
k=19, Ykij=120, L*kij=111,7, $\Delta Y/\Delta Y_u$=1,00
k=1, Ykij=102, L*kij=104,7, $\Delta Y/\Delta Y_u$=0,20
k=0, Ykij=101, L*kij=104,3, $\Delta Y/\Delta Y_u$=0,12

$\varphi = 90°$
$L_{aw} = 200 \, cd/m^2$

3,051

$m_{u90\_4} = 0,022, f_{90} = 2, f_4 = 0$
$m_u = 1,572$

1,039

application range

0,1   1   0,20 0,50 $Y_u = 18$ 100
                                 $Y_u = 19$

heu60−7a