

$(Y/\Delta Y) / (Y/\Delta Y)_u$

HAULAB-Y contrast
normalized to $(Y/\Delta Y)_u$

$C_r/C_{ru} = (Y/\Delta Y) / (Y/\Delta Y)_u$

$L^* = s(Y/Y_n)^n - d$ ($Y_n=100, Y_u=11, s=137,2, n=0,31, d=21,1$) [1a]

$L^* = r(Y/Y_u)^n - d$ ($r = s(Y_u/Y_n)^n = 80,63, L^*_u = r - d = 59,5$) [1b]

$Y_curve, ij=17, Y_{uij}=11, L^*_{uij}=50$

$k=99, Y_{kij}=300, L^*_{kij}=169,9, (Y/\Delta Y)/(Y/\Delta Y)_u = 1,92$

$k=11, Y_{kij}=212, L^*_{kij}=150,6, (Y/\Delta Y)/(Y/\Delta Y)_u = 1,6929$

$k=1, Y_{kij}=202, L^*_{kij}=148,0, (Y/\Delta Y)/(Y/\Delta Y)_u = 0,57$

$k=0, Y_{kij}=201, L^*_{kij}=147,8, (Y/\Delta Y)/(Y/\Delta Y)_u = 0,46$

$m_{u90} = 0,284, f_{90}=41, f_4=16$

$m_u = 0,674$

$\phi=90'$

$L_{aw} = 40 \text{ cd/m}^2$

application range

