**HAULAB tristimulus value difference**

$\Delta Y$ normalized to $\Delta Y_u$

$L^* = s(Y/Y_n)^n - d$   ($Y_n = 100$, $Y_u = 11$, $s = 134.6$, $n = 0.31$, $d = 19.2$) [1a]

$L^* = r(Y/Y_n)^n - d$   ($r = s(Y_u/Y_n)^n = 79.10$, $L^*_u = r - d = 59.8$) [1b]

$dY = [Y_n/(n \cdot s)](Y/Y_n)^{1-n}$ [2c]

$dY = [Y_n/(n \cdot s)](Y_u/Y_n)^{1-n} = 1.4083$ [2d]

$dY/dY_u = (Y/Y_u)^{1-n}$ [2e]

$m_{u90\_4} = 0.022$, $f_{90} = 2$, $f_4 = 0$

$m_u = 1.569$

$\varphi = 120°$
$L_{aw} = 40 \, cd/m^2$

**application range**

hen80-8a