CIE tristimulus value difference ΔY normalized to ΔY_u

$\Delta Y/\Delta Y_u$

CIELAB & TUBJND ΔY normalized to ΔY_u

white

$L^*_{TUBJND} = d \ln [1 + b \cdot (Y/Y_n)]$ a=25,6   b=6,141 [2a]

$L^*_{CIELAB} = 116 (Y/Y_n)^{1/3} - 16$ ($Y_n=100$, $0,89 \leq Y$)   [2b]

2,92

$L^*_{r,CIELAB}=1$, $m_u=1,561,00$

application range

$L^*_{u,CIELAB}=49$, $Y_u=18$

0,36

black

$Y_N=3,6$ $Y_u=18$ $Y_W=90$

0   50   100   150 Y

eef51-2a