NW-achromatic thresholds ΔY as function of Y

experiments and data: BAM-research report no. 115 (1985), page 72, see

$\log[\Delta Y]$ https:nbn-resolving.org/urn:nbn:de:kobv:b43-3350

tristimulus value threshold ΔY, see LABJND in TR CIE 230:219
Validity of Formulae for predicting Small Colour Differences

The performane of 8 datasets: http://files.cie.co.at/TC181_Datasets.zip
is best for LABJND in 5 cases, for CIELAB & CMC & CIEDE2000
all in one case, see Table 9 and 11 for the range $0 <= \Delta E^*_{ab} < 2$.

office-application range
according to ISO 9241-306

$\Delta Y = Y_2 - Y_1$

Y_1 Y_2

$Y_u = 18$

$Y_w = 90$

$Y_W = 90$

$\Delta Y = s + c\,Y = 0,017 + 0,0058\,Y$

$\Delta Y / \Delta Y_u = (1 + 6,14\,Y/Y_u) / (1 + 6,14)$

$Y_{N1} = 0,9$ $Y_N = 3,6$ $Y_u = 18$

$\log Y$

eeo11-7n EEJ11-7N