

Komplementäre Optimalfarben: Beziehung XYZ & Buntwerte A, B

nichtlineare Farbgrößen	Name und Zusammenhang mit Normfarbwerten XYZ und den Buntwerten (A, B)	Bemerkungen
Schwellen-Farbraum <i>ABY-JND1</i> Gleichung (1)	$\Delta E^*_{ABY} = Y_0 \{ [a_0 \Delta A_{01}]^2 + [b_0 \Delta B_{01}]^2 + [\Delta Y_{01}]^2 \}^{1/2}$ $= Y_0 \{ [c_0 \Delta C_{ab,01}]^2 + [\Delta Y_{01}]^2 \}^{1/2}$	$A = (a - a_n) \cdot Y$ $= (x/y - x_n/y_n) \cdot Y$ Normierung ähnlich wie in CIELAB:
Schwellen-Farbraum <i>ABY-JND2</i> Gleichung (1)	$\Delta E^*_{ABY} = Y_0 \{ [a_0 \Delta A_{01}]^2 + [b_0 \Delta B_{01}]^2 + [\Delta Y_{01} / Y_{01}]^2 \}^{1/2}$ $= Y_0 \{ [c_0 \Delta C_{ab,01}]^2 + [\Delta Y_{01} / Y_{01}]^2 \}^{1/2}$	$X_{01} = X/X_n; Y_{01} = Y/Y_n; Z_{01} = Z/Z_n$ Beziehung für Komplementärfarben (c):
Schwellen-Farbraum <i>ABY-JND3</i> Gleichung (1)	$\Delta E^*_{ABY} = Y_0 \{ [a_0 \Delta A_{01}/A_{01}]^2 + [b_0 \Delta B_{01}/B_{01}]^2 + [\Delta Y_{01}/Y_{01}]^2 \}^{1/2}$ $= Y_0 \{ [c_0 \Delta C_{ab,01}/C_{ab,01}]^2 + [\Delta Y_{01}/Y_{01}]^2 \}^{1/2}$	$X_{01c} = 1 - X_{01}; Y_{01c} = 1 - Y_{01}; Z_{01c} = 1 - Z_{01}$ Buntwerte:
Eigenschaften Komplementärfarben	$a_{01c} = -a_{01}; b_{01c} = -b_{01}; C_{ab,01c} = C_{ab,01};$ $\Delta a_{01c} = \Delta a_{01}; \Delta b_{01c} = \Delta b_{01}; \Delta C_{ab,01c} = \Delta C_{ab,01}; \Delta Y/Y = \text{const}$	$A_{01} = (a_{01} - a_{01n}) \cdot Y_{01}$ $= (x_{01} / y_{01} - 1) \cdot Y_{01}$ $= (X_{01} / Y_{01} - 1) \cdot Y_{01}$ $= X_{01} - Y_{01} = -A_{01c}$