

Komplementäre Optimalfarben: Beziehung XYZ & Buntwerte A, B		
nichtlineare Farbgrößen	Name und Zusammenhang mit Normfarbwerten XYZ und den Buntwerten (A, B)	Bemerkungen
Schwellen-Farbraum ABY-JND1 Gleichung (1)	$\Delta E^*_{\text{ABY}} = Y_0 \{ [a_0 \Delta A_{01}]^2 + [b_0 \Delta B_{01}]^2 + [\Delta Y_{01}]^2 \}^{1/2}$ $= Y_0 \{ [c_0 \Delta C_{\text{ab},01}]^2 + [\Delta Y_{01}]^2 \}^{1/2}$	$A = (a - a_n) \cdot Y = (x/y - x_n/y_n) \cdot Y$ Normierung ähnlich wie in CIELAB: $X_{01} = X/X_n; Y_{01} = Y/Y_n; Z_{01} = Z/Z_n$ Beziehung für Komplementärfarben (c): $X_{01c} = 1 - X_{01}; Y_{01c} = 1 - Y_{01}; Z_{01c} = 1 - Z_{01}$ Buntwerte: $A_{01} = (a_{01} - a_{01n}) \cdot Y_{01} = (x_{01} / y_{01} - 1) \cdot Y_{01} = (X_{01} / Y_{01} - 1) \cdot Y_{01} = X_{01} - Y_{01} = -A_{01c}$ $c = 0,017; d = 0,580$
Schwellen-Farbraum ABY-JND4 Gleichung (4)	$\Delta E^*_{\text{ABY}} = Y_0 \{ [a_0 \Delta A_{01} / Y_{01}]^2 + [b_0 \Delta B_{01} / Y_{01}]^2 + [\Delta Y_{01} / Y_{01}]^2 \}^{1/2}$ $= Y_0 \{ [c_0 \Delta C_{\text{ab},01} / Y_{01}]^2 + [\Delta Y_{01} / Y_{01}]^2 \}^{1/2}$	
Schwellen-Farbraum ABY-JND5 Gleichung (5)	$\Delta E^*_{\text{ABY}} = Y_0 \{ [a_0 \Delta a_{01} \cdot Y_{01}]^2 + [b_0 \Delta b_{01} \cdot Y_{01}]^2 + [\Delta Y_{01}]^2 \}^{1/2} / (c + d \cdot Y_{01})$ $= Y_0 \{ [c_0 \Delta c_{\text{ab},01} \cdot Y_{01}]^2 + [\Delta Y_{01}]^2 \}^{1/2} / (c + d \cdot Y_{01})$	
Eigenschaften Komplementärfarben	$a_{01c} = -a_{01}; b_{01c} = -b_{01}; C_{\text{ab},01c} = C_{\text{ab},01};$ $\Delta a_{01c} = \Delta a_{01}; \Delta b_{01c} = \Delta b_{01}; \Delta C_{\text{ab},01c} = \Delta C_{\text{ab},01};$	