

$(Y/\Delta Y) / (Y/\Delta Y)_u$ **LABJND-Y-Kontrast
normiert für $(Y/\Delta Y)_u$**

$$L^*/L^*_u = (t/a) \{ \ln(1 + a \cdot Y) - \ln(1 + a \cdot Y_u) \} \quad [1a]$$

$$L^*/L^*_u = (t/a) \{ \ln[1 + b \cdot (Y/Y_u)] - \ln(1 + b) \} \quad [1b]$$

Hellbezugswert-Y Kontrast

$$(Y/dY) / (Y_u/dY_u) = [Y / (1 + a \cdot Y)] / [Y_u / (1 + a \cdot Y_u)] \quad [4h]$$

hgp01-5a

 $(Y/\Delta Y) / (Y/\Delta Y)_u$ **CIELAB-Y-Kontrast
normiert für $(Y/\Delta Y)_u$**

$$L^* = s(Y/Y_u)^n - d \quad (Y_n=100, Y_u=18, s=116, n=1/3, d=16) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 65,49, L^*_u = r - d) \quad [1b]$$

$$Y/dY = Y / \{ [(Y_n / (n s))] (Y/Y_n)^{1-n} \} \quad [4c]$$

$$(Y/Y_u)_u = Y_u / \{ [(Y_n / (n s))] (Y_u/Y_n)^{1-n} \} \quad [4d]$$

$$(Y/dY) / (Y/dY)_u = (Y/Y_u)^n \quad [4e]$$

$$\log [(Y/dY) / (Y/dY)_u] = (n) \log(Y/Y_u) \quad [4f]$$

hgp01-6a

 $(Y/\Delta Y) / (Y/\Delta Y)_u$ **IECsRGB-Y-Kontrast
normiert für $(Y/\Delta Y)_u$**

$$L^* = s(Y/Y_u)^n - d \quad (Y_n=100, Y_u=18, s=100, n=1/2,4, d=0) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 48,94, L^*_u = r - d) \quad [1b]$$

$$Y/dY = Y / \{ [(Y_n / (n s))] (Y/Y_n)^{1-n} \} \quad [4c]$$

$$(Y/Y_u)_u = Y_u / \{ [(Y_n / (n s))] (Y_u/Y_n)^{1-n} \} \quad [4d]$$

$$(Y/dY) / (Y/dY)_u = (Y/Y_u)^n \quad [4e]$$

$$\log [(Y/dY) / (Y/dY)_u] = (n) \log(Y/Y_u) \quad [4f]$$

hgp01-7a

hgp01-7n

 $(Y/\Delta Y) / (Y/\Delta Y)_u$ **TUBsRGB-Y-Kontrast
normiert für $(Y/\Delta Y)_u$**

$$L^* = s(Y/Y_u)^n - d \quad (Y_n=100, Y_u=18, s=100, n=1/\ln(10), d=0) \quad [1a]$$

$$L^* = r(Y/Y_u)^n - d \quad (r = s(Y_u/Y_n)^n = 47,48, L^*_u = r - d) \quad [1b]$$

$$Y/dY = Y / \{ [(Y_n / (n s))] (Y/Y_n)^{1-n} \} \quad [4c]$$

$$(Y/Y_u)_u = Y_u / \{ [(Y_n / (n s))] (Y_u/Y_n)^{1-n} \} \quad [4d]$$

$$(Y/dY) / (Y/dY)_u = (Y/Y_u)^n \quad [4e]$$

$$\log [(Y/dY) / (Y/dY)_u] = (n) \log(Y/Y_u) \quad [4f]$$

hgp01-8a