

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

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

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

**Hellbezugswert-Y-Empfindlichkeit**

$$(dY/Y) / (dY/Y)_u = [(1 + a \cdot Y) / Y] / [(1 + a \cdot Y_u) / Y_u] \quad [3f]$$

hgp01-1a

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

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

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

$$dY/Y = [(Y_n / (n s))] (Y/Y_n)^{1-n} / Y \quad [3c]$$

$$(dY/Y)_u = [(Y_n / (n s))] (Y_u/Y_n)^{1-n} / Y_u \quad [3d]$$

$$(dY/Y) / (dY/Y)_u = (Y/Y_u)^{-n} \quad [3e]$$

$$\log [(dY/Y) / (dY/Y)_u] = (-n) \log(Y/Y_u) \quad [3f]$$

hgp01-2a

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

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

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

$$dY/Y = [(Y_n / (n s))] (Y/Y_n)^{1-n} / Y \quad [3c]$$

$$(dY/Y)_u = [(Y_n / (n s))] (Y_u/Y_n)^{1-n} / Y_u \quad [3d]$$

$$(dY/Y) / (dY/Y)_u = (Y/Y_u)^{-n} \quad [3e]$$

$$\log [(dY/Y) / (dY/Y)_u] = (-n) \log(Y/Y_u) \quad [3f]$$

hgp01-3a

hgp01-3n

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

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

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

$$dY/Y = [(Y_n / (n s))] (Y/Y_n)^{1-n} / Y \quad [3c]$$

$$(dY/Y)_u = [(Y_n / (n s))] (Y_u/Y_n)^{1-n} / Y_u \quad [3d]$$

$$(dY/Y) / (dY/Y)_u = (Y/Y_u)^{-n} \quad [3e]$$

$$\log [(dY/Y) / (dY/Y)_u] = (-n) \log(Y/Y_u) \quad [3f]$$

hgp01-4a