$L^*_{85,2}$ und $L^*_{85,2}/L^*_{85,2,u}$	**LABJND-Helligkeit $L^*_{85,2}$ normiert für die UmgebungsHelligkeit $L^*_{85,2,u}$**	L^* und L^*/L^*_u	**CIELAB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u**

text lightness

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

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

text relative lightness

$a = 0{,}3411$ $t = 88{,}23$ $t/a = 258{,}6$ $b = 6{,}141$ [1c]

text log(L^*/L_u)

text ln(L^*/L_u)

text $L^*/L_u = e^{**x}$

---

text lightness

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

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

text relative lightness

$L^*/L^*_u = g (Y/Y_u)^n - h$ ($g = r/(r-d) = 1{,}32$, $h = d/(r-d) = 0{,}32$)   [1c]

text log(L^*/L^*_u)

$\log[(L^*/L^*_u + h)/g] = n \log(Y/Y_u)$ [1d]

text ln(L^*/L_u)

$\ln[(L^*/L^*_u + h)/g] = \ln(10)\, n \log(Y/Y_u)$ [1e]

text $L^*/L^*_u = e^{**x}$

$(L^*/L^*_u + h)/g] = e^{\ln(10)\, n \log(Y/Y_u)}$ [1f]

L^* und L^*/L^*_u	**IECsRGB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u**	L^* und L^*/L^*_u	**TUBsRGB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u**

text lightness

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

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

text relative lightness

$L^*/L^*_u = (Y/Y_u)^n$ [1c]

text log(L^*/L_u)

$\log(L^*/L^*_u) = n \log(Y/Y_u)$ [1d]

text ln(L^*/L_u)

$\ln(L^*/L^*_u) = \ln(10)\, n \log(Y/Y_u)$ [1e]

text $L^*/L^*_u = e^{**x}$

$L^*/L^*_u = e^{\ln(10)\, n \log(Y/Y_u)}$ [1f]

---

text lightness

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

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

text relative lightness

$L^*/L^*_u = (Y/Y_u)^{1/\ln(10)}$ ($\ln(x) = \ln(10) \log(x)$)   [1c]

text log(L^*/L^*_u)

$\log(L^*/L^*_u) = (1/\ln(10)) \log(Y/Y_u)$ [1d]

text ln(L^*/L_u)

$\ln(L^*/L^*_u) = \log(Y/Y_u)$ [1e]

text $L^*/L^*_u = e^{**x}$

$L^*/L^*_u = e^{\log(Y/Y_u)}$ [1f]