http://farbe.li.tu-berlin.de/hgo3/hgo3l0np.pdf /.ps; nur Vektorgrafik VG; Start-Ausgabe
Siehe separate Bilder dieser Seite: http://farbe.li.tu-berlin.de/hgo3/hgo3.htm

Siehe ähnliche Dateien der ganzen Serie: http://farbe.li.tu-berlin.de/hgos.htm
Technische Information: http://farbe.li.tu-berlin.de oder http://color.li.tu-berlin.de

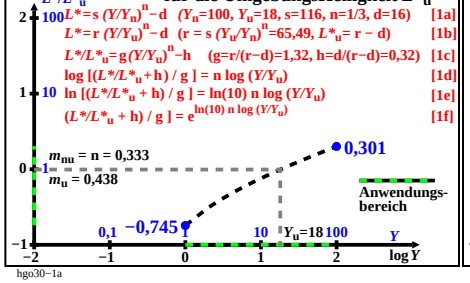
TUB-Registrierung: 20241001-hgo3/hgo3l0np.pdf /.ps
Anwendung für Beurteilung und Messung von Display- oder Druck-Ausgabe

TUB-Material: Code=rha4ta

log (L^*/L^*_u) — CIELAB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u

L^*/L^*_u

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$L^*/L^*_u=g(Y/Y_u)^n-h$ (g=r/(r−d)=1,32, h=d/(r−d)=0,32) [1c]
$\log[(L^*/L^*_u+h)/g]=n\log(Y/Y_u)$ [1d]
$\ln[(L^*/L^*_u+h)/g]=\ln(10)\,n\log(Y/Y_u)$ [1e]
$(L^*/L^*_u+h)/g=e^{\ln(10)\,n\log(Y/Y_u)}$ [1f]

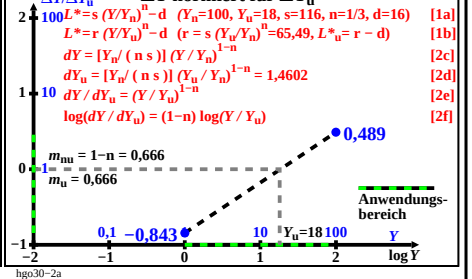


hgo30−1a

log ($\Delta Y/\Delta Y_u$) — CIELAB-Normfarbwertdifferenz ΔY normiert für ΔY_u

$\Delta Y/\Delta Y_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$dY=[Y_n/(n\,s)]\,(Y/Y_n)^{1-n}$ [2c]
$dY_u=[Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}$ = 1,4602 [2d]
$dY/dY_u=(Y/Y_u)^{1-n}$ [2e]
$\log(dY/dY_u)=(1-n)\log(Y/Y_u)$ [2f]

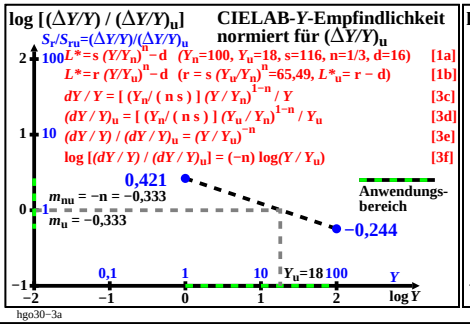


hgo30−2a

log [($\Delta Y/Y$) / (Y/Y_u)] — CIELAB-Y-Empfindlichkeit normiert für ($\Delta Y/Y$)$_u$

$S_r/S_{ru}=(\Delta Y/Y)/(\Delta Y/Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$dY/Y=[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}/Y$ [3c]
$(dY/Y)_u=[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}/Y_u$ [3d]
$(dY/Y)/(dY/Y)_u=(Y/Y_u)^{-n}$ [3e]
$\log[(dY/Y)/(dY/Y)_u]=(-n)\log(Y/Y_u)$ [3f]

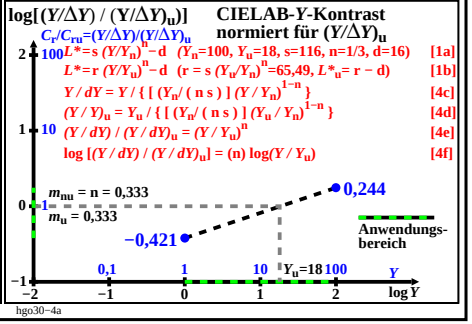


hgo30−3a

log[($Y/\Delta Y$) / ($Y/\Delta Y_u$)] — CIELAB-Y-Kontrast normiert für ($Y/\Delta Y$)$_u$

$C_r/C_{ru}=(Y/\Delta Y)/(Y/\Delta Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$Y/dY=Y/\{[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}\}$ [4c]
$(Y/Y)_u=Y_u/\{[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}\}$ [4d]
$(Y/dY)/(Y/dY)_u=(Y/Y_u)^n$ [4e]
$\log[(Y/dY)/(Y/dY)_u]=(n)\log(Y/Y_u)$ [4f]



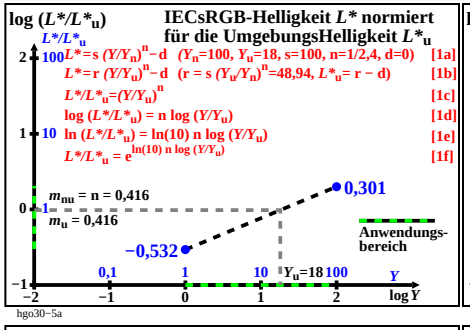
hgo30−4a

hgo30−3n

log (L^*/L^*_u) — IECsRGB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u

L^*/L^*_u

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

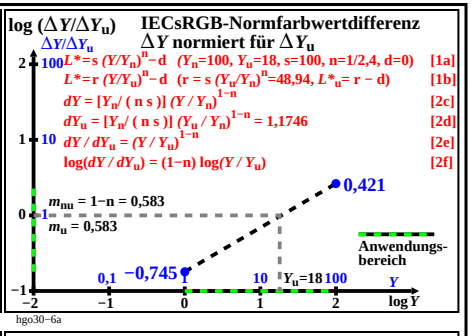


hgo30−5a

log ($\Delta Y/\Delta Y_u$) — IECsRGB-Normfarbwertdifferenz ΔY normiert für ΔY_u

$\Delta Y/\Delta Y_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$dY=[Y_n/(n\,s)]\,(Y/Y_n)^{1-n}$ [2c]
$dY_u=[Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}$ = 1,1746 [2d]
$dY/dY_u=(Y/Y_u)^{1-n}$ [2e]
$\log(dY/dY_u)=(1-n)\log(Y/Y_u)$ [2f]

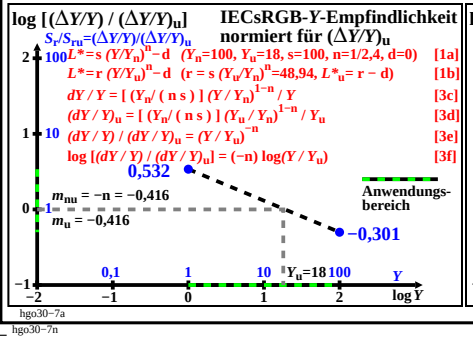


hgo30−6a

log [($\Delta Y/Y$) / (Y/Y_u)] — IECsRGB-Y-Empfindlichkeit normiert für ($\Delta Y/Y$)$_u$

$S_r/S_{ru}=(\Delta Y/Y)/(\Delta Y/Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$dY/Y=[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}/Y$ [3c]
$(dY/Y)_u=[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}/Y_u$ [3d]
$(dY/Y)/(dY/Y)_u=(Y/Y_u)^{-n}$ [3e]
$\log[(dY/Y)/(dY/Y)_u]=(-n)\log(Y/Y_u)$ [3f]

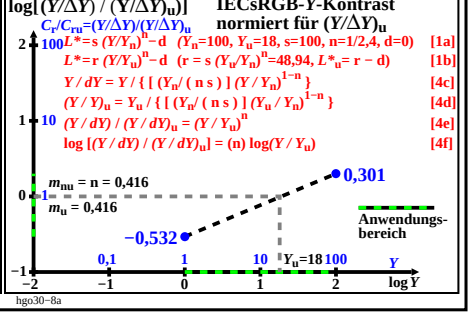


hgo30−7a

log[($Y/\Delta Y$) / ($Y/\Delta Y_u$)] — IECsRGB-Y-Kontrast normiert für ($Y/\Delta Y$)$_u$

$C_r/C_{ru}=(Y/\Delta Y)/(Y/\Delta Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$Y/dY=Y/\{[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}\}$ [4c]
$(Y/Y)_u=Y_u/\{[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}\}$ [4d]
$(Y/dY)/(Y/dY)_u=(Y/Y_u)^n$ [4e]
$\log[(Y/dY)/(Y/dY)_u]=(n)\log(Y/Y_u)$ [4f]



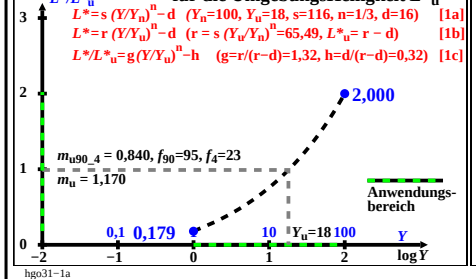
hgo30−8a

hgo30−7n

L^*/L^*_u — CIELAB-Helligkeit L^* normiert für die UmgebungsHelligkeit L^*_u

L^*/L^*_u

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$L^*/L^*_u=g(Y/Y_u)^n-h$ (g=r/(r−d)=1,32, h=d/(r−d)=0,32) [1c]

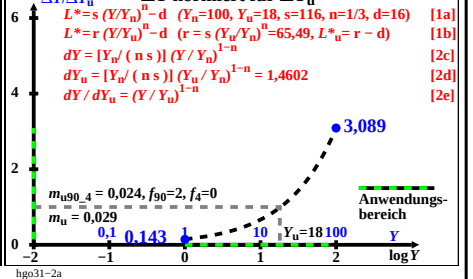


hgo31−1a

$\Delta Y/\Delta Y_u$ — CIELAB-Normfarbwertdifferenz ΔY normiert für ΔY_u

$\Delta Y/\Delta Y_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$dY=[Y_n/(n\,s)]\,(Y/Y_n)^{1-n}$ [2c]
$dY_u=[Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}$ = 1,4602 [2d]
$dY/dY_u=(Y/Y_u)^{1-n}$ [2e]

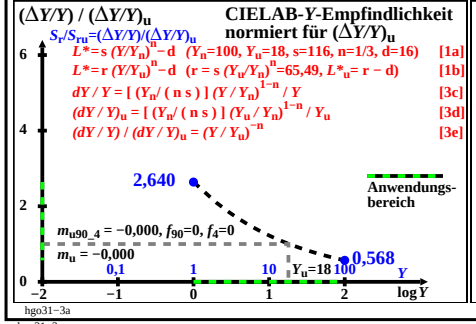


hgo31−2a

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

$S_r/S_{ru}=(\Delta Y/Y)/(\Delta Y/Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$dY/Y=[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}/Y$ [3c]
$(dY/Y)_u=[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}/Y_u$ [3d]
$(dY/Y)/(dY/Y)_u=(Y/Y_u)^{-n}$ [3e]

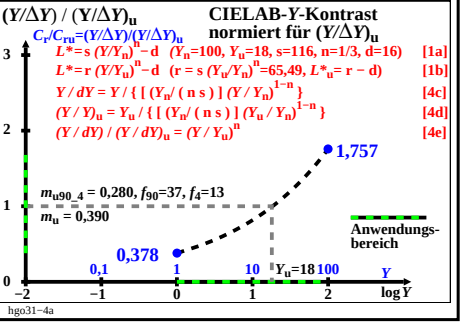


hgo31−3a

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

$C_r/C_{ru}=(Y/\Delta Y)/(Y/\Delta Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (Y_n=100, Y_u=18, s=116, n=1/3, d=16) [1a]
$L^*=r\,(Y/Y_u)^n-d$ (r = s (Y_u/Y_n)^n=65,49, L^*_u= r − d) [1b]
$Y/dY=Y/\{[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}\}$ [4c]
$(Y/Y)_u=Y_u/\{[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}\}$ [4d]
$(Y/dY)/(Y/dY)_u=(Y/Y_u)^n$ [4e]



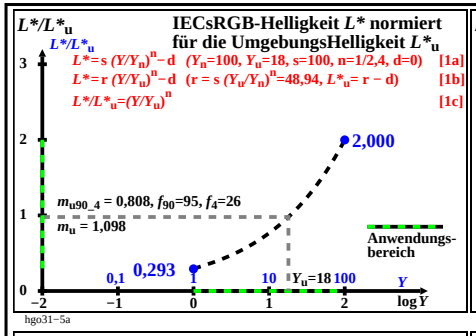
hgo31−4a

hgo31−3n

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

L^*/L^*_u

$L^*=s\,(Y/Y_n)^n-d$ (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]
$L^*/L^*_u=(Y/Y_u)^n$ [1c]

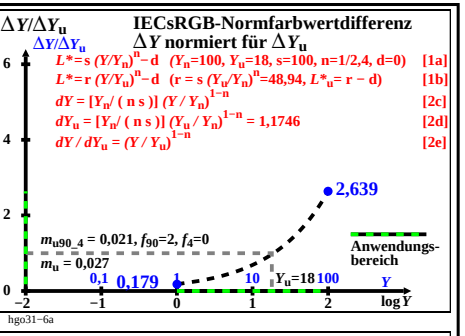


hgo31−5a

$\Delta Y/\Delta Y_u$ — IECsRGB-Normfarbwertdifferenz ΔY normiert für ΔY_u

$\Delta Y/\Delta Y_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$dY=[Y_n/(n\,s)]\,(Y/Y_n)^{1-n}$ [2c]
$dY_u=[Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}$ = 1,1746 [2d]
$dY/dY_u=(Y/Y_u)^{1-n}$ [2e]

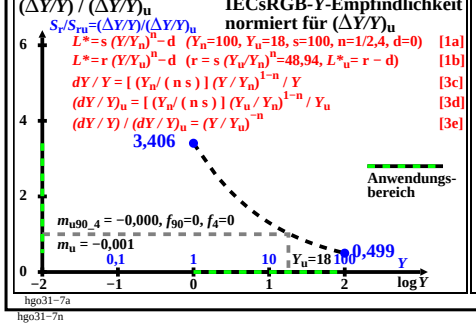


hgo31−6a

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

$S_r/S_{ru}=(\Delta Y/Y)/(\Delta Y/Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$dY/Y=[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}/Y$ [3c]
$(dY/Y)_u=[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}/Y_u$ [3d]
$(dY/Y)/(dY/Y)_u=(Y/Y_u)^{-n}$ [3e]

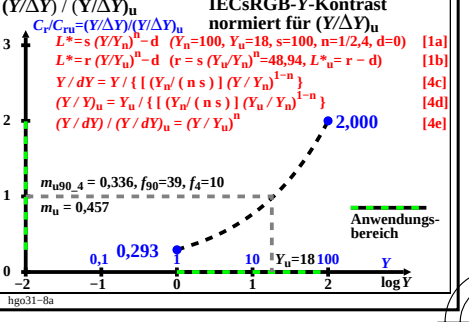


hgo31−7a

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

$C_r/C_{ru}=(Y/\Delta Y)/(Y/\Delta Y)_u$

$L^*=s\,(Y/Y_n)^n-d$ (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]
$Y/dY=Y/\{[(Y_n/(n\,s)]\,(Y/Y_n)^{1-n}\}$ [4c]
$(Y/Y)_u=Y_u/\{[(Y_n/(n\,s)]\,(Y_u/Y_n)^{1-n}\}$ [4d]
$(Y/dY)/(Y/dY)_u=(Y/Y_u)^n$ [4e]



hgo31−8a

TUB-Prüfvorlage hgo3; CIELAB- & IECsRGB-Farbabstand, ISO/CIE 11664-4 & IEC 61966-2-1
log & lin[Helligkeit L^*, Schwelle ΔY, Empfindlichkeit $\Delta Y/Y$, Kontrast $Y/\Delta Y$, normiert für Grau U]