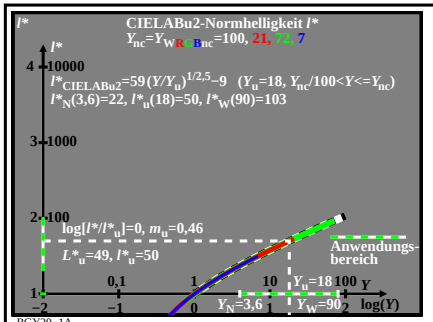
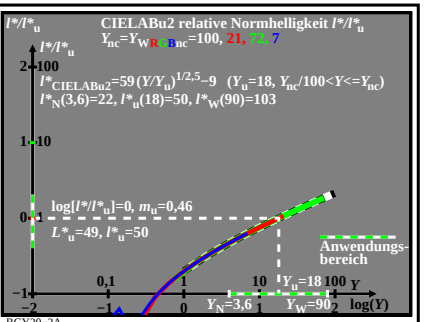
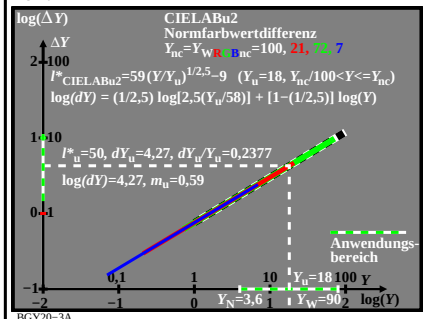
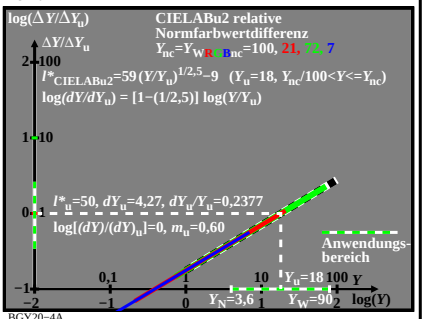
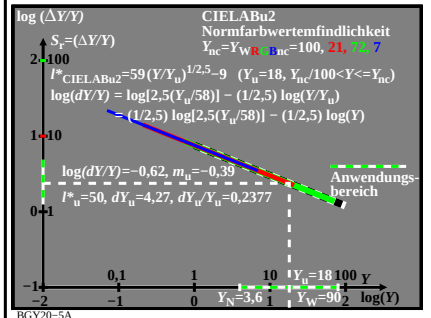
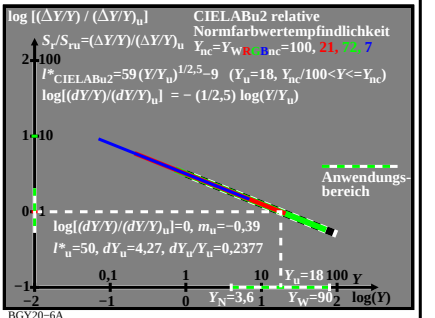

l*
CIELABu2-Normhelligkeit l*
Ync=YWRGBnc=100, 21, 72, 7
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
l*N(3,6)=22, l*u(18)=50, l*W(90)=103
log[l*/l*u]=0, mu=0,46
L*u=49, l*u=50
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−1A

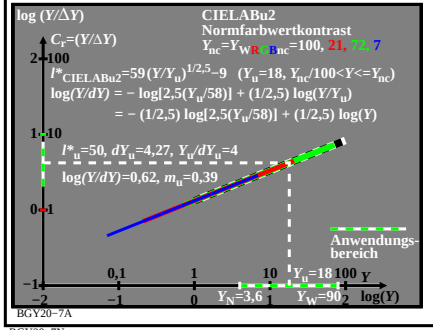

l*/l*u
CIELABu2 relative Normhelligkeit l*/l*u
Ync=YWRGBnc=100, 21, 72, 7
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
l*N(3,6)=22, l*u(18)=50, l*W(90)=103
log[l*/l*u]=0, mu=0,46
L*u=49, l*u=50
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−2A

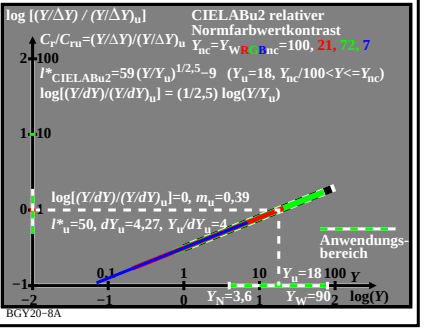

log(ΔY)
CIELABu2
Normfarbwertdifferenz
Ync=YWRGBnc=100, 21, 72, 7
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log(dY) = (1/2,5) log[2,5(Yu/58)] + [1−(1/2,5)] log(Y)
l*u=50, dYu=4,27, dYu/Yu=0,2377
log(dY)=4,27, mu=0,59
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−3A


log(ΔY/ΔYu)
CIELABu2 relative
Normfarbwertdifferenz
Ync=YWRGBnc=100, 21, 72, 7
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log(dY/dYu) = [1−(1/2,5)] log(Y/Yu)
l*u=50, dYu=4,27, dYu/Yu=0,2377
log[(dY)/(dY)u]=0, mu=0,60
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−4A


log (ΔY/Y)
CIELABu2
Normfarbwertemfindlichkeit
Ync=YWRGBnc=100, 21, 72, 7
Sr=(ΔY/Y)
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log(dY/Y) = log[2,5(Yu/58)] − (1/2,5) log(Y/Yu)
= (1/2,5) log[2,5(Yu/58)] − (1/2,5) log(Y)
log(dY/Y)=−0,62, mu=−0,39
l*u=50, dYu=4,27, dYu/Yu=0,2377
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−5A


log [(ΔY/Y) / (ΔY/Y)u]
CIELABu2 relative
Normfarbwertempfindlichkeit
Ync=YWRGBnc=100, 21, 72, 7
Sr/Sru=(ΔY/Y)/(ΔY/Y)u
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log[(dY/Y)/(dY/Y)u] = − (1/2,5) log(Y/Yu)
log[(dY/Y)/(dY/Y)u]=0, mu=−0,39
l*u=50, dYu=4,27, dYu/Yu=0,2377
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−6A


log (Y/ΔY)
CIELABu2
Normfarbwertkontrast
Ync=YWRGBnc=100, 21, 72, 7
Cr=(Y/ΔY)
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log(Y/dY) = − log[2,5(Yu/58)] + (1/2,5) log(Y/Yu)
= − (1/2,5) log[2,5(Yu/58)] + (1/2,5) log(Y)
l*u=50, dYu=4,27, Yu/dYu=4
log(Y/dY)=0,62, mu=0,39
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−7A
BGY20−7N


log [(Y/ΔY) / (Y/ΔY)u]
CIELABu2 relativer
Normfarbwertkontrast
Ync=YWRGBnc=100, 21, 72, 7
Cr/Cru=(Y/ΔY)/(Y/ΔY)u
l*CIELABu2=59 (Y/Yu)1/2,5−9 (Yu=18, Ync/100<Y<=Ync)
log[(Y/dY)/(Y/dY)u] = (1/2,5) log(Y/Yu)
log[(Y/dY)/(Y/dY)u]=0, mu=0,39
l*u=50, dYu=4,27, Yu/dYu=4
Anwendungs-bereich
Yu=18 100 Y
YN=3,6 1 YW=90 2 log(Y)
BGY20−8A