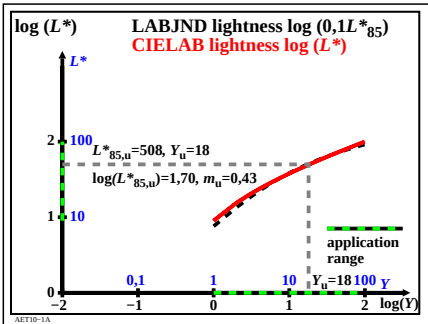
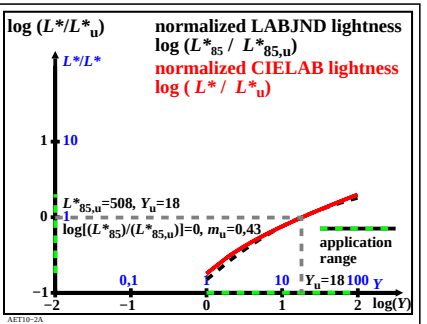
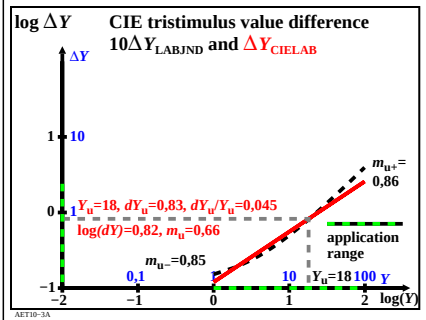
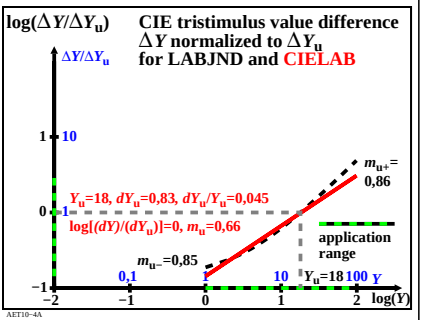
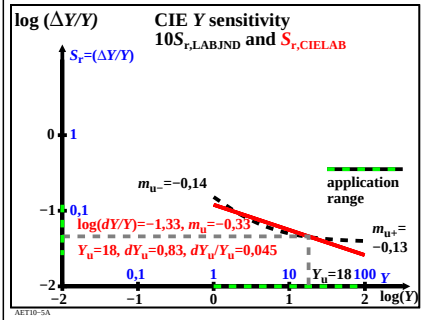
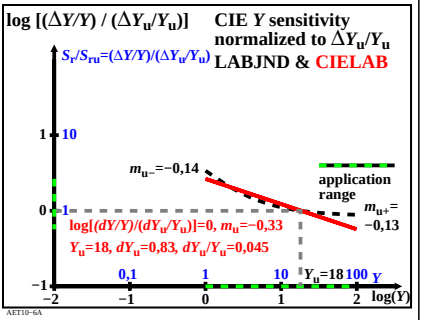

log (L*)
LABJND lightness log (0,1L*85)
CIELAB lightness log (L*)
L*
100
2
10
1
L*85,u=508, Yu=18
log(L*85,u)=1,70, mu=0,43
application range
0,1
1
10
Yu=18
100
Y
0
−2
−1
0
1
2
log(Y)
AET10-1A

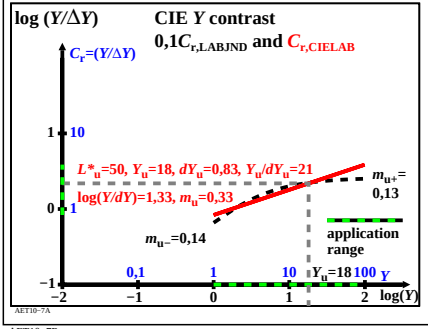

log (L*/L*u)
normalized LABJND lightness
log (L*85 / L*85,u)
normalized CIELAB lightness
log (L* / L*u)
L*/L*
1
10
0
1
L*85,u=508, Yu=18
log[(L*85)/(L*85,u)]=0, mu=0,43
application range
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-2A

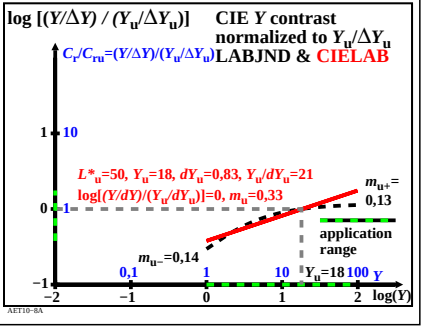

log ΔY
CIE tristimulus value difference
10ΔYLABJND and ΔYCIELAB
ΔY
1
10
0
1
mu+= 0,86
Yu=18, dYu=0,83, dYu/Yu=0,045
log(dY)=0,82, mu=0,66
application range
mu−=0,85
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-3A


log(ΔY/ΔYu)
CIE tristimulus value difference
ΔY normalized to ΔYu
for LABJND and CIELAB
ΔY/ΔYu
1
10
0
1
mu+= 0,86
Yu=18, dYu=0,83, dYu/Yu=0,045
log[(dY)/(dYu)]=0, mu=0,66
application range
mu−=0,85
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-4A


log (ΔY/Y)
CIE Y sensitivity
10Sr,LABJND and Sr,CIELAB
Sr=(ΔY/Y)
0
1
0,1
mu−=−0,14
application range
log(dY/Y)=−1,33, mu=−0,33
mu+= −0,13
Yu=18, dYu=0,83, dYu/Yu=0,045
0,1
1
10
Yu=18
100
Y
−2
−1
0
1
2
log(Y)
AET10-5A


log [(ΔY/Y) / (ΔYu/Yu)]
CIE Y sensitivity
normalized to ΔYu/Yu
LABJND & CIELAB
Sr/Sru=(ΔY/Y)/(ΔYu/Yu)
1
10
0
1
mu−=−0,14
application range
mu+= −0,13
log[(dY/Y)/(dYu/Yu)]=0, mu=−0,33
Yu=18, dYu=0,83, dYu/Yu=0,045
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-6A


log (Y/ΔY)
CIE Y contrast
0,1Cr,LABJND and Cr,CIELAB
Cr=(Y/ΔY)
1
10
0
1
L*u=50, Yu=18, dYu=0,83, Yu/dYu=21
log(Y/dY)=1,33, mu=0,33
mu+= 0,13
mu−=0,14
application range
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-7A


log [(Y/ΔY) / (Yu/ΔYu)]
CIE Y contrast
normalized to Yu/ΔYu
Cr/Cru=(Y/ΔY)/(Yu/ΔYu)
LABJND & CIELAB
1
10
0
1
L*u=50, Yu=18, dYu=0,83, Yu/dYu=21
log[(Y/dY)/(Yu/dYu)]=0, mu=0,33
mu+= 0,13
mu−=0,14
application range
0,1
1
10
Yu=18
100
Y
−1
−2
−1
0
1
2
log(Y)
AET10-8A

AET10−7R