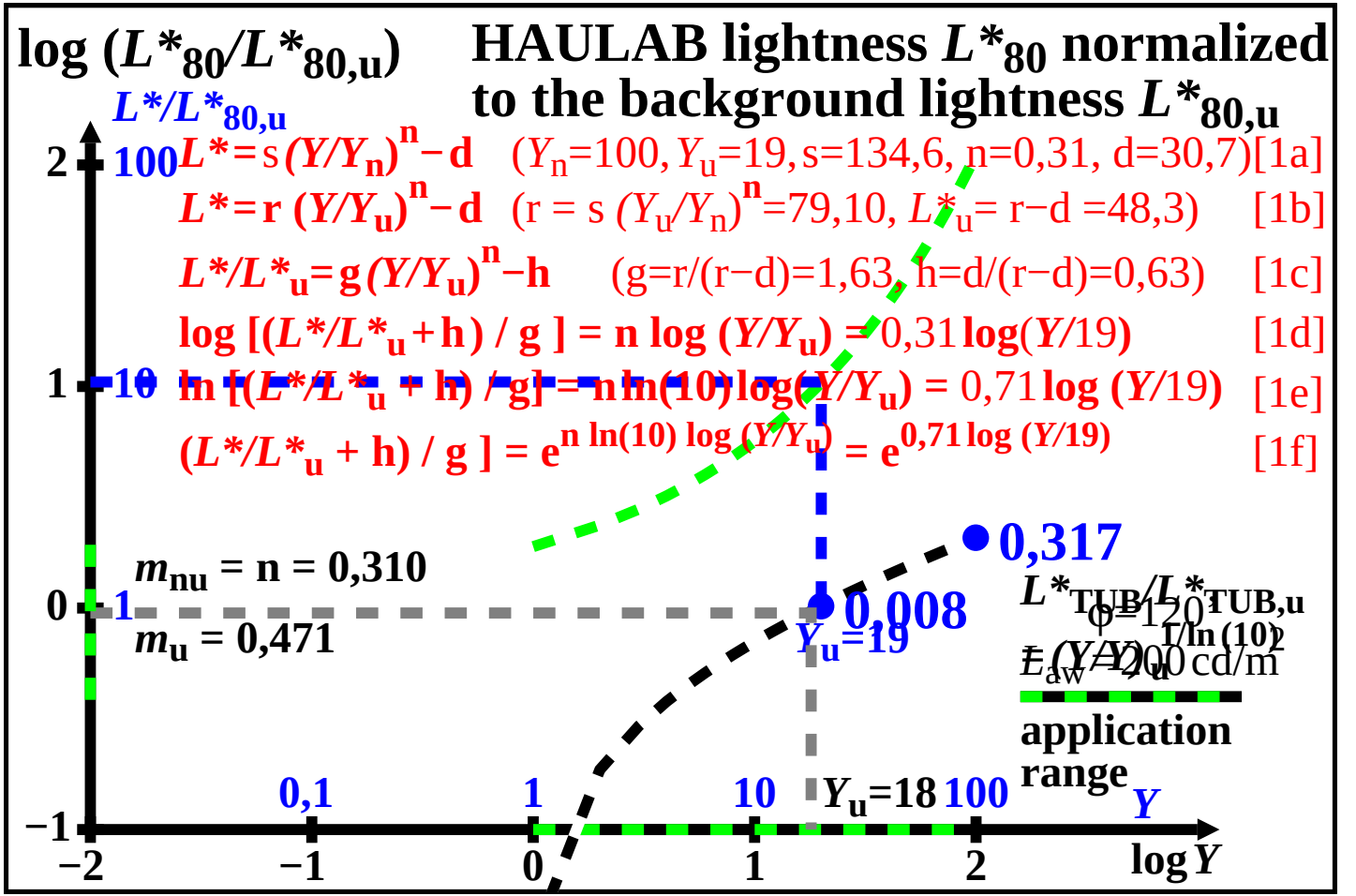
log (L*80/L*80,u)
HAULAB lightness L*80 normalized to the background lightness L*80,u
L*/L*80,u
L*=s(Y/Yn)n−d (Yn=100, Yu=19, s=134,6, n=0,31, d=30,7) [1a]
L*=r (Y/Yu)n−d (r = s (Yu/Yn)n=79,10, L*u= r−d =48,3) [1b]
L*/L*u=g(Y/Yu)n−h (g=r/(r−d)=1,63, h=d/(r−d)=0,63) [1c]
log [(L*/L*u+h) / g] = n log (Y/Yu) = 0,31 log(Y/19) [1d]
ln [(L*/L*u + h) / g] = n ln(10) log(Y/Yu) = 0,71 log (Y/19) [1e]
(L*/L*u + h) / g] = e n ln(10) log (Y/Yu) = e 0,71 log (Y/19) [1f]
mnu = n = 0,310
mu = 0,471
0,317
0,008
Yu=19
L*TUB/L*TUB,u
Φ=120°
r/ln (10)
Eaw=200 cd/m2
application range
0,1
1
10
Yu=18
100
Y
log Y
100
10
1
2
1
0
−1
−2
−1
0
1
2
heo90−3a