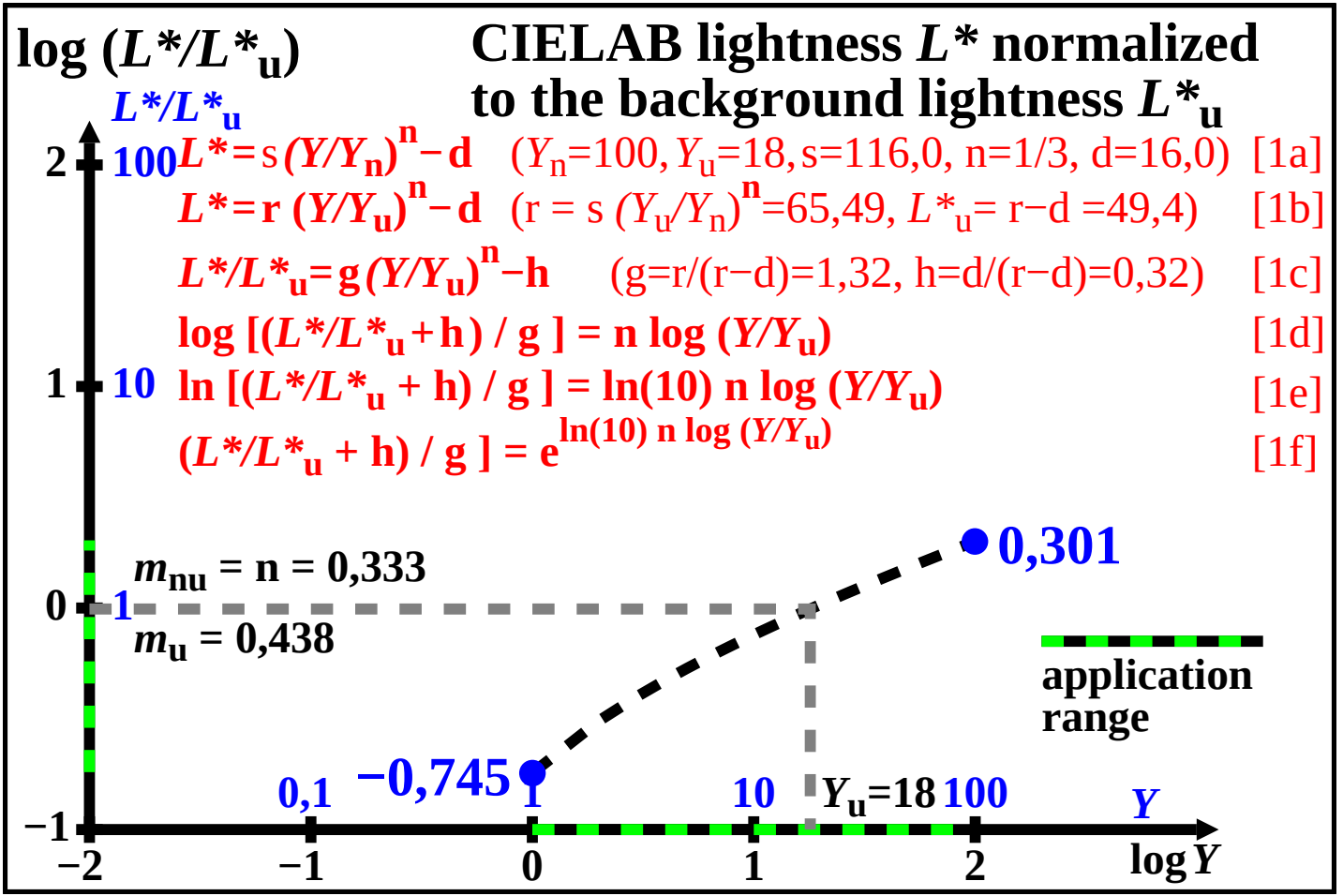
log (L*/L*u)
CIELAB lightness L* normalized to the background lightness L*u
L*/L*u
2
100
1
10
0
1
−1
L* = s (Y/Yn)^n − d (Yn=100, Yu=18, s=116,0, n=1/3, d=16,0) [1a]
L* = r (Y/Yu)^n − d (r = s (Yu/Yn)^n=65,49, L*u= r−d =49,4) [1b]
L*/L*u = g (Y/Yu)^n − h (g=r/(r−d)=1,32, h=d/(r−d)=0,32) [1c]
log [(L*/L*u + h) / g ] = n log (Y/Yu) [1d]
ln [(L*/L*u + h) / g ] = ln(10) n log (Y/Yu) [1e]
(L*/L*u + h) / g ] = e^ln(10) n log (Y/Yu) [1f]
mnu = n = 0,333
mu = 0,438
0,301
application range
0,1
−0,745
1
10
Yu=18
100
Y
−2
−1
0
1
2
log Y

hep70−5a