

$\log(Y/\Delta Y)$

CIE Y contrast

$0,1C_{r,LABJND}$ and $C_{r,CIEDE2000}$

$C_r = Y/\Delta Y$

Y contrast according to CIEDE2000

$$\begin{aligned}\log(Y/dY) &= \log[(1/3) (116/Y_n)] + (1/3) \log(Y/Y_n) \\ &= \log[(1/3) (116/(Y_n^{1/3}))] + (1/3) \log(Y)\end{aligned}$$

1 10

$L^*_u=50, Y_u=18, dY_u=0,83, (Y/dY_u)=22$

$m_{u+}=0,13$

0 1

$\log(Y/dY)_u=1,33, m_u=0,18$

$m_{u-}=0,14$

application range

-1 -2

0,1 -1

1 0

10 1

100 2

$Y_u=18$ 100 Y $\log Y$