

$\log(Y/\Delta Y)$

CIE Y contrast

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

$C_r = Y/\Delta Y$

Y contrast according to CIELAB

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

2 100

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

1 10

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

$m_{u+}=0,13$

$m_{u-}=0,14$

application range

0

0,1

1

10

$Y_u=18$ 100 Y

$\log Y$