

$\log(\Delta Y/\Delta Y_u)$

relative IECsRGB-
tristimulus value difference

$\Delta Y/\Delta Y_u$

2 100

$$L^*_{IECsRGB} = s(Y/Y_u)^{1/2,4} \quad (s=50, Y_u=18, 1/255 < Y < 100)$$

relative IECsRGB-tristimulus value difference

1 10

$$\begin{aligned} \log(dY) &= \log(2,4(Y_u/100)) + (1-(1/2,4)) \log(Y/Y_u) \\ &= \log(2,4(Y_u^{1/2,4})/100) + (1-(1/2,4)) \log(Y) \end{aligned}$$

0 1

$$Y_u=18, dY_u=0,90, dY_u/Y_u=0,0480$$

$$\log[(dY)/(dY_u)]=0, m_u=0,58$$

application
range

0,1

1

$Y_N=4$ 10

$Y_u=18$ 100

Y

-2

-1

0

1

2

$\log(Y)$