

$\log[Y/\Delta Y]$

$Y_{\text{CIELAB contrast}}$

$$L^* = 116 (Y/Y_n)^{1/3} - 16, \quad Y_n = 100, Y_u = 18, 1 \leq Y \leq 100 [1g]$$

$$L^* = k_u (Y/Y_u)^{1/3} - 16, \quad k_u = 116 [Y_u/Y_n]^{1/3} = 65,50 \quad [2g]$$

$$Y/dY = (3/116) \cdot Y_n^{1/3} Y^{2/3} \quad [3g]$$

$$Y/dY = e \cdot (Y/Y_u)^{1/3} = f \cdot (Y/Y_u)^{1/3} \quad [4g]$$

2  
100

$\log[(Y_u/dY_u) = 1,33, m_u = 0,33$

$Y_u = 18, dY_u = 0,83, Y_u/dY_u = 21$

N threshold

1  
10

application range

0,1

1

10

$Y_u = 18$  100

1000 Y

-2

-1

0

1

2

3  $\log Y$