

$\log(Y/\Delta Y)$

CIE Y-based contrast

$C_r = (Y/\Delta Y)$

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

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

$$Y/dY = e \cdot (Y/Y_n)^{2/3}$$

$$Y/dY = f \cdot (Y/Y_n)^{2/3}$$

$$e = 833,048, f = 9743,392$$

[1g]

[2g]

[3g]

[4g]

[5g]

2 100

218,3

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

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

1 4,8

$Y_N=3,6 \quad Y_u=18 \quad Y_W=90$

application range

1

10

100

1000

10000 Y

-1

0

1

2

3

4

$\log Y$