

$\log(\Delta Y)$

IECsRGBu5

tristimulus value difference

$Y_{nc} = Y_W$ RGB_{nc} = 100, 21, 72, 7

ΔY
2
100

$$t^*_{IECsRGBu5} = 50 (Y/Y_u)^{1/2,4} \quad (Y_u = 18, Y_{nc}/100 < Y \leq Y_{nc})$$

$$\log(dY) = (1/2,4) \log[2,4(Y_u/50)] + [1 - (1/2,4)] \log(Y)$$

1
10

$$t^*_u = 50, dY_u = 4,80, dY_u/Y_u = 0,2666$$

$$\log(dY) = 4,80, m_u = 0,58$$

0
1

$$dY_{90} = 12,27, \gamma = 2,4, 1/\gamma = 1/2,4 = 0,4$$

$$dY_{18} = 4,80, S_n = 50,00, D_n = -0,00$$

$$dY_{3,6} = 1,87, Y_u = 18, dY_u = 4,80$$

application
range

0,1

1

10

100

$Y_u = 18$

100

Y

-2

0,1

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000

1000000000000

$Y_N = 3,6$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

$Y_W = 90$

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

1

10

100

1000

10000

100000

1000000

10000000

100000000

1000000000

10000000000

100000000000