

log (Y/ΔY)

LABJNDu0

tristimulus value contrast

$Y_{nc} = L^*_{wRGBnc} = 100, 52, 87, 31$

$$C_r = (Y/\Delta Y)$$

4
10000

$$L^*_{LABJNDu0} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu0} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

$$Y/dY = Y/[A_{0n}(A_{1n} + A_{2n}Y)] = x Y_u/[A_{0n}(A_{1n} + A_{2u}x)]$$

3
1000

2
100

$$L^*_u = 332, dY_u = 0,18, Y_u/dY_u = 98$$

$$\log(Y/dY) = 1,99, m_u = 0,13$$

application range

1
-2 -1 0 1 10 100
 $x_N = 0,2$ $x_W = 5$ $x_u = 1$ Y
log(Y)