

log (Y/ ΔY)

LABJNDu4

tristimulus value contrast

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

$C_r = (Y/\Delta Y)$

4 10000

$$L^*_{LABJNDu4} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$L^*_{LABJNDu4} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

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

3 1000

$$(Y/dY)_{90} = 113,39, A_{0n} = 1,5, A_{2u} = 0,1044, c_x = 0,42$$

$$(Y/dY)_{18} = 107,58, A_{1n} = 0,007, A_{2n} = 0,0058$$

$$(Y/dY)_{3,6} = 85,65, Y_u = 18, dY_u = 0,16$$

$$L^*_u = 332, dY_u = 0,16, Y_u/dY_u = 107$$

2 100

$$\log(Y/dY) = 2,03, m_u = 0,02$$

application
range

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