

log (Y/ΔY)

LABJNDu3

tristimulus value contrast

$Y_{nc} = Y_{wRGBnc} = 100, 21, 72, 7$

$C_r = (Y/\Delta Y)$

4 10000

$I_{LABJNDu3}^* = \ln(A_{1n} + A_{2n}Y)/(A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$

$I_{LABJNDu3}^* = \ln(A_{1n} + A_{2u}x)/(A_{2u}A_{0n}) \quad (x = Y/Y_u)$

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

3 1000

$I_u^* = 1116, dY_u = 0,05, Y_u/dY_u = 331$

$\log(Y/dY) = 2,52, m_u = 0,13$

2 100

$(Y/dY)_{90} = 373,82, A_{0n} = 0,6666, A_{2n} = 0,0699, A_{2u} = 0,67$

$(Y/dY)_{18} = 371,94, A_{1n} = 0,011, A_{2n} = 0,0038, A_{1u} = 0,011$

$(Y/dY)_{30} = 212,76, Y_u = 18, dY_u = 0,05$

application
range

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