

$\log(\Delta Y)$

LABJNDu8

tristimulus value difference

$Y_{nc}=Y_W \text{RGB}_{nc}=100, 21, 72, 7$

ΔY

10

$$t^*_{\text{LABJNDu8}} = \ln(A_{1n} + A_{2n}Y) / (A_{2n}A_{0n}) \quad (Y_{nc}/100 < Y \leq Y_{nc})$$

$$t^*_{\text{LABJNDu8}} = \ln(A_{1n} + A_{2u}x) / (A_{2u}A_{0n}) \quad (x = Y/Y_u)$$

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

1 $A_{0n,D65}=1,5, A_{0n,A}=1,0$, see CIE 230:2019

$$t^*_{u} = 332, dY_u = 0,17, dY_u/T_u = 0,0096$$

$$0,1 \log(dY) = 0,17, m_u = 0,90$$

application range

-2

0,1
-1

1
0

x_N=0,2
1

10
1

x_u=1
1

100
5

Y
2

log(Y)
1