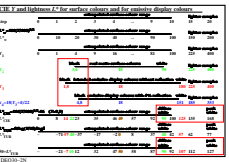
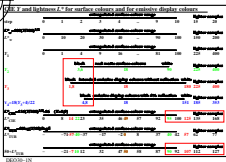


see similar files: http://farbe.li.tu-berlin.de/DEQ3/DEQ3L0N1.TXT /PS technical information: http://farbe.li.tu-berlin.de or http://color.li.tu-berlin.de

TUB registration: 20220301-DEQ3/DEQ3L0N1.TXT /PS TUB material code=mathta application for evaluation and measurement of display or print output



LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = A_1 + A_2 Y$ error 0,0044 $A_1=0,0170, A_2=0,0058$ [1] $[1]$

$= A_1 + A_{20}(Y/Y_0)$ $A_1=0,0170, A_{20}=0,1004, A_2=0$ [2] $[2]$

$dY = A_1 + A_2 Y^b$ error 0,0019 $A_1=0,0258, A_2=0,0036, A_3=1,087$ [3] $[3]$

$= A_1 + A_{20}(Y/Y_0)^b$ $A_1=0,0258, A_{20}=0,0823, A_3=1,087$ [4] $[4]$

$dY = A_1 [1 + A_2 Y]$ error 0,0044 $A_1=0,0170, A_2=0,3343$ [5] $[5]$

$= A_1 [1 + A_{20}(Y/Y_0)]$ $A_1=0,0170, A_{20}=5,931-A_2 Y_0$ [6] $[6]$

$dY = A_1 [1 + A_2 Y]^b$ error 0,0018 $A_1=0,0251, A_2=0,1566, A_3=1,107$ [7] $[7]$

$= A_1 [1 + A_{20}(Y/Y_0)]^b$ $A_1=0,0251, A_{20}=2,778-A_2 Y_0$ [8] $[8]$

LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = A_1 + A_2 Y$ error 0,0044 $A_1=0,0170, A_2=0,0058$ [16] $[16]$

$= A_1 + A_{20}(Y/Y_0)$ $A_1=0,0170, A_{20}=0,1004-A_2 Y_0$ [26] $[26]$

$\frac{dY}{A_1 + A_2 Y} = \frac{1}{A_1} \ln |1 + A_2 Y| = F^*(Y)$ $(A_2 > 0)$ [10] $[10]$

$dY = A_1 [1 + A_2 Y]$ error 0,0044 $A_1=0,0170, A_2=0,3343$ [56] $[56]$

$= A_1 [1 + A_{20}(Y/Y_0)]$ $A_1=0,0170, A_{20}=5,931-A_2 Y_0$ [66] $[66]$

$\frac{1}{A_1} \int \frac{dY}{1 + A_2 Y} = \frac{1}{A_1} \ln |1 + A_2 Y| = F^*(Y)$ $(A_2 > 0)$ [50] $[50]$

LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = A_1 + A_2 Y$ error 0,0044 $A_1=0,0170, A_2=0,0058$ [14] $[14]$

$dY = A_1 + A_{20}(Y/Y_0)$ $A_1=0,0170, A_{20}=0,1004, Y_0 = (Y/Y_0)$ [24] $[24]$

$\int \frac{dY}{A_1 + A_2 Y} = \frac{1}{A_2} \ln |1 + A_2 Y| = F^*(Y_0)$ $(A_2 > 0)$ [20] $[20]$

$dY = A_1 [1 + A_2 Y]$ error 0,0044 $A_1=0,0170, A_2=0,3343$ [54] $[54]$

$dY = A_1 [1 + A_{20}(Y/Y_0)]$ $A_1=0,0170, A_{20}=5,931, Y_0 = (Y/Y_0)$ [64] $[64]$

$\frac{1}{A_1} \int \frac{dY}{1 + A_2 Y} = \frac{1}{A_1} \ln |1 + A_2 Y| = F^*(Y)$ $(A_2 > 0)$ [60] $[60]$

LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = A_1 + A_2 Y^b$ error 0,0019 $A_1=0,0258, A_2=0,0036, A_3=1,087$ [34] $[34]$

$= A_1 + A_{20}(Y/Y_0)^b$ $A_1=0,0258, A_{20}=0,0826, A_3=1,087$ [44] $[44]$

$\int \frac{dY}{A_1 + A_2 Y^b} = \frac{A_1 Y + A_2 Y^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ [30] $[30]$

$dY = A_1 [1 + A_2 Y]^b$ error 0,0018 $A_1=0,0251, A_2=0,1566, A_3=1,107$ [74] $[74]$

$= A_1 [1 + A_{20}(Y/Y_0)]^b$ $A_1=0,0251, A_{20}=2,778-A_2 Y_0$ [84] $[84]$

$\frac{1}{A_1} \int \frac{dY}{[1 + A_2 Y]^b} = \frac{1}{A_1} \frac{[1 + A_2 Y]^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ [70] $[70]$

LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = [A_1 + A_2 Y]^b$ error 0,0018 $A_1=0,0358, A_2=0,00561, A_3=1,107$ [94] $[94]$

$= [A_1 + A_{20}(Y/Y_0)]^b$ $A_1=0,0358, A_{20}=0,49995, A_3=1,107$ [104] $[104]$

$\int \frac{dY}{[A_1 + A_2 Y]^b} = \frac{[A_1 + A_2 Y]^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ $[90]$ $[90]$

$dY = A_1 [1 + A_2 Y]^b$ error 0,0018 $A_1=0,0251, A_2=0,1566, A_3=1,107$ [74] $[74]$

$= A_1 [1 + A_{20}(Y/Y_0)]^b$ $A_1=0,0251, A_{20}=2,778-A_2 Y_0$ [84] $[84]$

$\frac{1}{A_1} \int \frac{dY}{[1 + A_2 Y]^b} = \frac{1}{A_1} \frac{[1 + A_2 Y]^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ [70] $[70]$

LABJND colour difference formula of CIE 230:2019
 Modifications with normalization to Y_0 of surround

$dY = A_1 + A_2 Y^b$ error 0,0019 $A_1=0,0258, A_2=0,0036, A_3=1,087$ [34] $[34]$

$= A_1 + A_{20}(Y/Y_0)^b$ $A_1=0,0258, A_{20}=0,0823, A_3=1,087$ [44] $[44]$

$\int \frac{dY}{A_1 + A_2 Y^b} = \frac{A_1 Y + A_2 Y^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ $[30]$ $[30]$

$dY = A_1 [1 + A_2 Y]^b$ error 0,0018 $A_1=0,0251, A_2=0,1566, A_3=1,107$ [74] $[74]$

$= A_1 [1 + A_{20}(Y/Y_0)]^b$ $A_1=0,0251, A_{20}=2,778-A_2 Y_0$ [84] $[84]$

$\frac{1}{A_1} \int \frac{dY}{[1 + A_2 Y]^b} = \frac{1}{A_1} \frac{[1 + A_2 Y]^{b+1}}{A_2(b+1)} = F^*(Y)$ $(A_2 > 0)$ [70] $[70]$

