

http://130.149.60.45/~farbmetrikk/OE29/OE29L0N1.TXT/.PS; start output
N: No Output Linearization (OL) data in File (F), Startup (S) or Device (D)

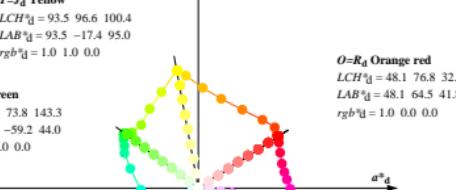
Data of Maximum color M in colorimetric system laser printer HRS18_96; no separation, D65 and D50 for input or output; Six hue angles of the 60 degree standard colours s : $h_{abs} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$; Six hue angles of the device colours d : $h_{abs,d} = 32.9, 100.4, 143.4, 206.8, 264.1, 351.1$; Six hue angles of the elementary colours e : $h_{abs,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

Y-G_d Yellow
 $LCH^d_s = 93.5 \quad 96.6 \quad 100.4$
 $LAB^d_s = 93.5 \quad -17.4 \quad 95.0$
 $rgb^d_s = 1.0 \quad 1.0 \quad 0.0$

L-G_d Leaf green
 $LCH^d_s = 60.2 \quad 73.8 \quad 143.3$
 $LAB^d_s = 60.2 \quad -59.2 \quad 44.0$
 $rgb^d_s = 0.0 \quad 1.0 \quad 0.0$

C-C_d Cyan blue
 $LCH^d_s = 56.3 \quad 45.8 \quad 206.8$
 $LAB^d_s = 56.3 \quad -40.8 \quad -20.6$
 $rgb^d_s = 0.0 \quad 1.0 \quad 1.0$

device CIELAB (a^s_d, b^s_d) chroma diagram

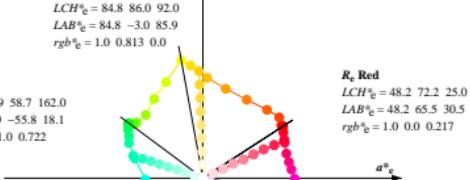


O-R_d Orange red
 $LCH^d_s = 48.1 \quad 76.8 \quad 32.9$
 $LAB^d_s = 48.1 \quad 64.5 \quad 41.8$
 $rgb^d_s = 1.0 \quad 0.0 \quad 0.0$

M-M_d Magenta red
 $LCH^d_s = 48.2 \quad 73.0 \quad 351.0$
 $LAB^d_s = 48.2 \quad 72.2 \quad -11.3$
 $rgb^d_s = 1.0 \quad 0.0 \quad 1.0$

V-B_d Violet blue (very similar to elementary Blue)
 $LCH^d_s = 38.6 \quad 46.5 \quad 264.0$
 $LAB^d_s = 38.6 \quad -4.8 \quad -46.2$
 $rgb^d_s = 0.0 \quad 0.0 \quad 1.0$

elementary CIELAB (a^s_e, b^s_e) chroma diagram



G_e Green
 $LCH^e_s = 57.9 \quad 58.7 \quad 162.0$
 $LAB^e_s = 57.9 \quad -55.8 \quad 18.1$
 $rgb^e_s = 0.0 \quad 1.0 \quad 0.722$

R_e Red
 $LCH^e_s = 48.2 \quad 72.2 \quad 25.0$
 $LAB^e_s = 48.2 \quad 65.5 \quad 30.5$
 $rgb^e_s = 1.0 \quad 0.0 \quad 0.217$

C_e Blue green
 $LCH^e_s = 54.1 \quad 48.5 \quad 217.0$
 $LAB^e_s = 54.1 \quad -38.7 \quad -29.2$
 $rgb^e_s = 0.0 \quad 0.928 \quad 1.0$

B_e Blue
 $LCH^e_s = 37.0 \quad 48.3 \quad 272.0$
 $LAB^e_s = 37.0 \quad 1.6 \quad -48.3$
 $rgb^e_s = 0.401 \quad 0.0 \quad 1.0$

Notes to the CIELAB chroma diagrams (a^s_d, b^s_d , a^s_e, b^s_e , a^s_c, b^s_c)

1. For the rgb_s -input values the CIELAB data LCH^d_s and LAB^d_s have been measured.

2. For the calculation of the standard hue angle h_{abs} use for any device values rgb^d_s the equation:

$$h_{abs} = atan [r^d_s \cos(30) + g^d_s \cos(150)] / [r^d_s \sin(30) + g^d_s \sin(150) + b^d_s \sin(270)] \quad (1)$$

3. For the 48 or 360 equally spaced standard hue angles $h_{abs,i}$ of the colours of maximum chroma use the seven hue angles of the 60 degree colours s : $h_{abs,s1} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$ (i=0,6) and the equations for a 48 and 360 step hue circle:

$$h_{48ab,i,j} = h_{abs,s1} + j [h_{abs,s1+1} - h_{abs,s1}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,i,j} = h_{abs,s1} + j [h_{abs,s1+1} - h_{abs,s1}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$

4. For the 48 or 360 elementary hue angles $h_{abs,e}$ of the colours of maximum chroma use the seven hue angles of the elementary colours e : $h_{abs,e1} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$ (i=0,6) and the equations for a 48 and 360 step elementary hue circle:

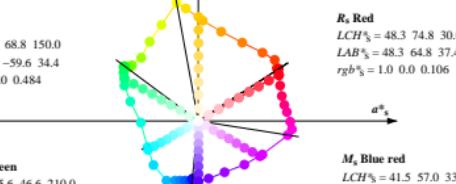
$$h_{48ab,e,i,j} = h_{abs,e1} + j [h_{abs,e1+1} - h_{abs,e1}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,e,i,j} = h_{abs,e1} + j [h_{abs,e1+1} - h_{abs,e1}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$

5. For any elementary hue angle $h_{abs,e}$ there is a well defined device hue angle $h_{abs,d}$ see the following tables, columns 1 to 3.

6. The values rgb^d_s produce the output of the device-independent elementary hues

J_d Yellow
 $LCH^d_s = 82.9 \quad 83.7 \quad 90.0$
 $LAB^d_s = 82.9 \quad 0.0 \quad 83.7$
 $rgb^d_s = 1.0 \quad 0.784 \quad 0.0$



R_d Red
 $LCH^s_s = 48.3 \quad 74.8 \quad 30.0$
 $LAB^s_s = 48.3 \quad 64.8 \quad 37.4$
 $rgb^s_s = 1.0 \quad 0.0 \quad 0.106$

C_d Blue green
 $LCH^s_s = 58.3 \quad 68.8 \quad 150.0$
 $LAB^s_s = 58.3 \quad -59.6 \quad 34.4$
 $rgb^s_s = 0.0 \quad 1.0 \quad 0.484$

M_d Magenta red
 $LCH^s_s = 41.5 \quad 57.0 \quad 330.0$
 $LAB^s_s = 41.5 \quad 49.4 \quad -28.5$
 $rgb^s_s = 0.856 \quad 0.0 \quad 1.0$

B_d Blue
 $LCH^s_s = 37.2 \quad 48.6 \quad 270.0$
 $LAB^s_s = 37.2 \quad 0.0 \quad -48.6$
 $rgb^s_s = 0.0 \quad 0.977 \quad 1.0$

OE29-7N, Page of series 1/4, RX0, D65, XYZnw=1.8, 1.8, 1.9, 88.1, 93.2, 98.1, LAB^{nw}=14.7, 0.3, 1.3, 97.3, -0.9, 2.2, not adapted

TUB-test chart OE29; 48 and 360 step hue circles, Page 1/1
Data of laser printer HRS16_96, no separation, D65 and D50

Output: laser printer HRS18_96; no separation, D65 and D50, page 1/4

Input: rgb^d_s setrgbcolor
Output: no change