

Data of Maximum color M in colorimetric system Offset print ORS42_18_96; separation cmy6*, D65 and D50 for input or output; Six hue angles of the 60 degree standard colours s: $h_{ab,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$;
Six hue angles of the device colours d: $h_{ab,d} = 31.3, 96.3, 152.3, 234.1, 299.3, 353.1$; Six hue angles of the elementary colours e: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

Y=J_d Yellow
device CIELAB (a^*_d, b^*_d) chroma diagram

$LCH^*_d = 90.4 \ 88.7 \ 96.3$
 $LAB^*_d = 90.4 \ -9.7 \ 88.1$
 $rgb^*_d = 1.0 \ 1.0 \ 0.0$

L=G_d Leaf green

$LCH^*_d = 56.0 \ 73.4 \ 152.2$
 $LAB^*_d = 56.0 \ -65.0 \ 34.1$
 $rgb^*_d = 0.0 \ 1.0 \ 0.0$

C=C_d Cyan blue

$LCH^*_d = 62.9 \ 51.9 \ 234.1$
 $LAB^*_d = 62.9 \ -30.4 \ -42.1$
 $rgb^*_d = 0.0 \ 1.0 \ 1.0$

O=R_d Orange red

$LCH^*_d = 48.4 \ 77.5 \ 31.3$
 $LAB^*_d = 48.4 \ 66.2 \ 40.3$
 $rgb^*_d = 1.0 \ 0.0 \ 0.0$

M=M_d Magenta red

$LCH^*_d = 49.4 \ 74.2 \ 353.1$
 $LAB^*_d = 49.4 \ 73.7 \ -8.9$
 $rgb^*_d = 1.0 \ 0.0 \ 1.0$

V=B_d Violet blue (very different to elementary Blue)

$LCH^*_d = 27.3 \ 53.5 \ 299.3$
 $LAB^*_d = 27.3 \ 26.2 \ -46.7$
 $rgb^*_d = 0.0 \ 0.0 \ 1.0$

J_e Yellow
elementary CIELAB (a^*_e, b^*_e) chroma diagram

$LCH^*_e = 85.8 \ 82.9 \ 92.0$
 $LAB^*_e = 85.8 \ -2.8 \ 82.9$
 $rgb^*_e = 1.0 \ 0.889 \ 0.0$

G_e Green

$LCH^*_e = 57.0 \ 64.7 \ 162.0$
 $LAB^*_e = 57.0 \ -61.5 \ 20.0$
 $rgb^*_e = 0.0 \ 1.0 \ 0.168$

C_e Blue green

$LCH^*_e = 61.3 \ 49.0 \ 217.0$
 $LAB^*_e = 61.3 \ -39.1 \ -29.5$
 $rgb^*_e = 0.0 \ 1.0 \ 0.794$

B_e Blue

$LCH^*_e = 41.1 \ 45.0 \ 272.0$
 $LAB^*_e = 41.1 \ 1.5 \ -45.0$
 $rgb^*_e = 0.0 \ 0.387 \ 1.0$

R_e Red

$LCH^*_e = 48.7 \ 73.8 \ 25.0$
 $LAB^*_e = 48.7 \ 66.9 \ 31.2$
 $rgb^*_e = 1.0 \ 0.0 \ 0.172$

M_e Blue red

$LCH^*_e = 37.4 \ 58.8 \ 329.0$
 $LAB^*_e = 37.4 \ 50.4 \ -30.3$
 $rgb^*_e = 0.463 \ 0.0 \ 1.0$

J_s Yellow
standard CIELAB (a^*_s, b^*_s) chroma diagram

$LCH^*_s = 83.9 \ 80.8 \ 90.0$
 $LAB^*_s = 83.9 \ 0.0 \ 80.8$
 $rgb^*_s = 1.0 \ 0.843 \ 0.0$

G_s Green

$LCH^*_s = 57.1 \ 72.0 \ 150.0$
 $LAB^*_s = 57.1 \ -62.3 \ 36.0$
 $rgb^*_s = 0.039 \ 1.0 \ 0.0$

R_s Red

$LCH^*_s = 48.5 \ 76.6 \ 30.0$
 $LAB^*_s = 48.5 \ 66.4 \ 38.3$
 $rgb^*_s = 1.0 \ 0.0 \ 0.037$

C_s Blue green

$LCH^*_s = 60.7 \ 48.8 \ 210.0$
 $LAB^*_s = 60.7 \ -42.3 \ -24.4$
 $rgb^*_s = 0.0 \ 1.0 \ 0.713$

M_s Blue red

$LCH^*_s = 37.7 \ 59.1 \ 330.0$
 $LAB^*_s = 37.7 \ 51.2 \ -29.5$
 $rgb^*_s = 0.477 \ 0.0 \ 1.0$

B_s Blue

$LCH^*_s = 42.0 \ 45.0 \ 270.0$
 $LAB^*_s = 42.0 \ 0.0 \ -45.0$
 $rgb^*_s = 0.0 \ 0.411 \ 1.0$

Notes to the CIELAB chroma diagrams (a^*_d, b^*_d), (a^*_e, b^*_e), (a^*_s, b^*_s)

- For the rgb^*_d -input values the CIELAB data LCH^*_d and LAB^*_d have been measured.
- For the calculation of the standard hue angle $h_{ab,s}$ use for any device values rgb^*_d the equation:
 $h_{ab,s} = \arctan \left(\frac{r^*_d \cos(30) + g^*_d \cos(150)}{r^*_d \sin(30) + g^*_d \sin(150)} \right) + b^*_d \sin(270)$ (1)
- For the 48 or 360 equally spaced standard hue angles $h_{ab,s}$ of the colours of maximum chroma use the seven hue angles of the 60 degree colours s: 30.0, 90.0, 150.0, 210.0, 270.0, 330.0 (i=0,5) and the equations for a 48 and 360 step hue circle:
 $h_{ab,ab,s,j} = h_{ab,s,i} + j |h_{ab,s,i+1} - h_{ab,s,i}| / 8 \ (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7)$ (2)
 $h_{360,ab,s,j} = h_{ab,s,i} + j |h_{ab,s,i+1} - h_{ab,s,i}| / 60 \ (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59)$ (3)
- For the 48 or 360 elementary hue angles $h_{ab,e}$ of the colours of maximum chroma use the seven hue angles of the elementary colours e: 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5 (i=0,5) and the equations for a 48 and 360 step elementary hue circle:
 $h_{ab,ab,e,j} = h_{ab,e,i} + j |h_{ab,e,i+1} - h_{ab,e,i}| / 8 \ (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7)$ (4)
 $h_{360,ab,e,j} = h_{ab,e,i} + j |h_{ab,e,i+1} - h_{ab,e,i}| / 60 \ (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59)$ (5)
- For any elementary hue angle $h_{ab,e}$ there is a well defined device hue angle $h_{ab,d}$ see the following tables, columns 1 to 3.
- The values rgb^*_d produce the output of the device-independent elementary hues