

Data of Maximum color M in colorimetric system Offset print ORS04_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: $h_{ab,d} = 31.3, 96.2, 152.6, 234.0, 298.7, 353.0$; 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
LCH_d^{*} = 90.2 88.7 96.2
LAB_d^{*} = 90.2 -9.6 88.2
rgb_d^{*} = 1.0 1.0 0.0

L=G_d Leaf green
LCH_d^{*} = 55.8 73.5 152.5
LAB_d^{*} = 55.8 -65.2 33.8
rgb_d^{*} = 0.0 1.0 0.0

C=C_d Cyan blue
LCH_d^{*} = 63.0 51.9 234.0
LAB_d^{*} = 63.0 -30.5 -42.0
rgb_d^{*} = 0.0 1.0 1.0

O=R_d Orange red
LCH_d^{*} = 48.4 77.4 31.3
LAB_d^{*} = 48.4 66.1 40.2
rgb_d^{*} = 1.0 0.0 0.0

M=M_d Magenta red
LCH_d^{*} = 49.5 74.1 352.9
LAB_d^{*} = 49.5 73.5 -9.0
rgb_d^{*} = 1.0 0.0 1.0

V=B_d Violet blue (very different to elementary Blue)
LCH_d^{*} = 27.5 54.0 298.7
LAB_d^{*} = 27.5 25.9 -47.3
rgb_d^{*} = 0.0 0.0 1.0

J_e Yellow
LCH_e^{*} = 85.7 82.6 92.0
LAB_e^{*} = 85.7 -2.8 82.6
rgb_e^{*} = 1.0 0.889 0.0

G_e Green
LCH_e^{*} = 56.9 65.0 162.0
LAB_e^{*} = 56.9 -61.8 20.0
rgb_e^{*} = 0.0 1.0 0.161

C_e Blue green
LCH_e^{*} = 61.3 49.2 217.0
LAB_e^{*} = 61.3 -39.3 -29.6
rgb_e^{*} = 0.0 1.0 0.795

B_e Blue
LCH_e^{*} = 41.1 45.1 272.0
LAB_e^{*} = 41.1 1.5 -45.1
rgb_e^{*} = 0.0 0.385 1.0

R_e Red
LCH_e^{*} = 48.7 73.7 25.0
LAB_e^{*} = 48.7 66.8 31.1
rgb_e^{*} = 1.0 0.0 0.173

M_e Blue red
LCH_e^{*} = 37.5 59.0 329.0
LAB_e^{*} = 37.5 50.5 -30.3
rgb_e^{*} = 0.465 0.0 1.0

J_s Yellow
LCH_s^{*} = 83.8 80.6 90.0
LAB_s^{*} = 83.8 0.0 80.6
rgb_s^{*} = 1.0 0.843 0.0

G_s Green
LCH_s^{*} = 57.1 71.7 150.0
LAB_s^{*} = 57.1 -62.1 35.8
rgb_s^{*} = 0.045 1.0 0.0

C_s Blue green
LCH_s^{*} = 60.7 49.0 210.0
LAB_s^{*} = 60.7 -42.4 -24.5
rgb_s^{*} = 0.0 1.0 0.714

B_s Blue
LCH_s^{*} = 42.1 45.1 270.0
LAB_s^{*} = 42.1 0.0 -45.1
rgb_s^{*} = 0.0 0.409 1.0

R_s Red
LCH_s^{*} = 48.5 76.6 30.0
LAB_s^{*} = 48.5 66.3 38.3
rgb_s^{*} = 1.0 0.0 0.037

M_s Blue red
LCH_s^{*} = 37.8 59.3 330.0
LAB_s^{*} = 37.8 51.4 -29.6
rgb_s^{*} = 0.479 0.0 1.0

Notes to the CIELAB chroma diagrams (a^*_{ab}, b^*_{ab}), (a^*_{ab}, b^*_{ab}), (a^*_{ab}, b^*_{ab})

- For the rgb^*_{ab} -input values the CIELAB data LCH^*_{ab} and LAB^*_{ab} have been measured.
- For the calculation of the standard hue angle $h_{ab,s}$ use for any device values rgb^*_{ab} the equation:
$$h_{ab,s} = \arctan \left(\frac{r^*_{ab} \cos(30) + g^*_{ab} \cos(150)}{r^*_{ab} \sin(30) + g^*_{ab} \sin(150)} \right) \quad (1)$$
- 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: $h_{ab,s} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$ ($i=0,5$) and the equations for a 48 and 360 step hue circle:
$$h_{360ab,sj} = h_{ab,sj} + j |h_{ab,sj+1} - h_{ab,sj}| / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,sj} = h_{ab,sj} + j |h_{ab,sj+1} - h_{ab,sj}| / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$
- 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: $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$ ($i=0,5$) and the equations for a 48 and 360 step elementary hue circle:
$$h_{360ab,ej} = h_{ab,ej} + j |h_{ab,ej+1} - h_{ab,ej}| / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,ej} = h_{ab,ej} + j |h_{ab,ej+1} - h_{ab,ej}| / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$
- 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^*_{ab} produce the output of the device-independent elementary hues