



BAM-test chart NE47; Colorimetric systems SRS D65: 5 step colour scales and coordinate data for

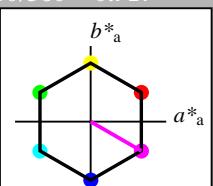
5 step scales for constant CIELAB hue 354/360 = 0.982 (right)
z ORS18 input: *olv** *setrgbcolor*
ues output: *olv** *setrgbcolor* / *w** *setgr*

Input: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 330/360 = 0.917$
 lab^*tch and lab^*nch

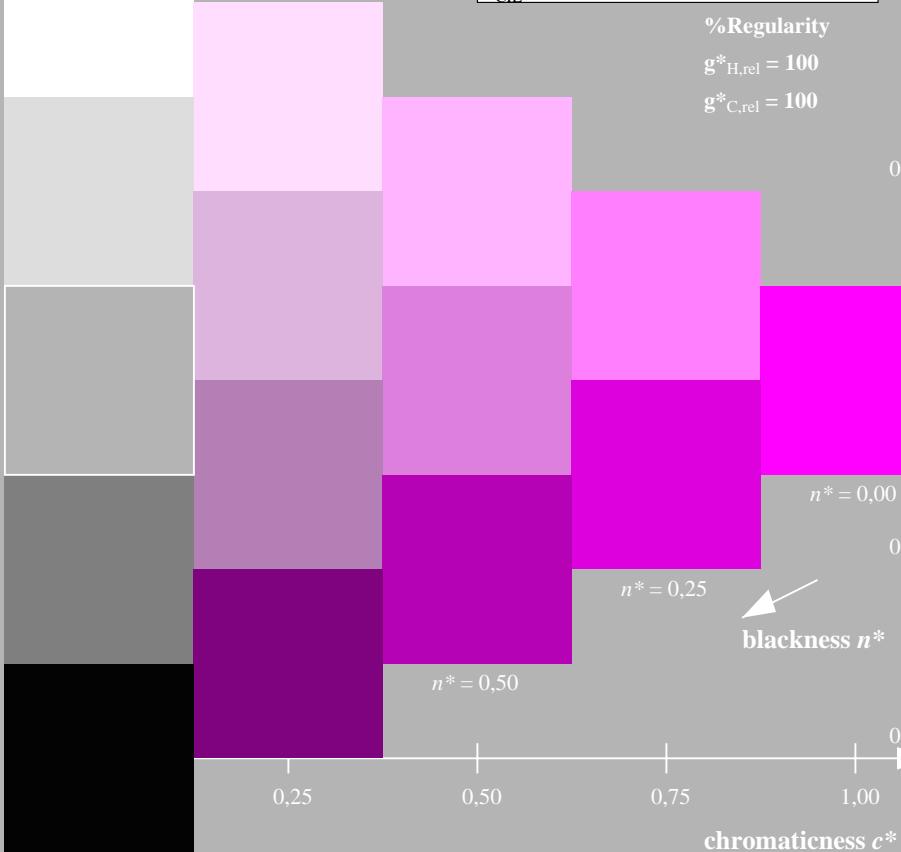
D65: hue M
LCH*Ma: 57 77 330
olv*Ma: 1.0 0.0 1.0

triangle lightness



SRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	$a^* = a^*_a$	$b^* = b^*_a$	$C^* = ab_a$	$h^* = ab_a$
O _{Ma}	56.71	67.03	38.7	77.4	30
Y _{Ma}	56.71	0.0	77.4	77.4	90
L _{Ma}	56.71	-67.02	38.7	77.4	150
C _{Ma}	56.71	-67.02	-38.69	77.4	210
V _{Ma}	56.71	0.0	-77.39	77.4	270
M _{Ma}	56.71	67.03	-38.69	77.4	330
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272

%Regularity



NE470-7, 5 step scales for constant CIELAB hue 330/360 = 0.017 (left)

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = \underline{354}/360 = 0.982$

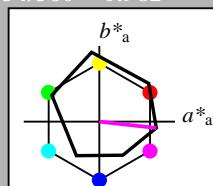
*lab*tch* and *lab*nch*

D65: hue M

LCH*Ma: 48 76 354

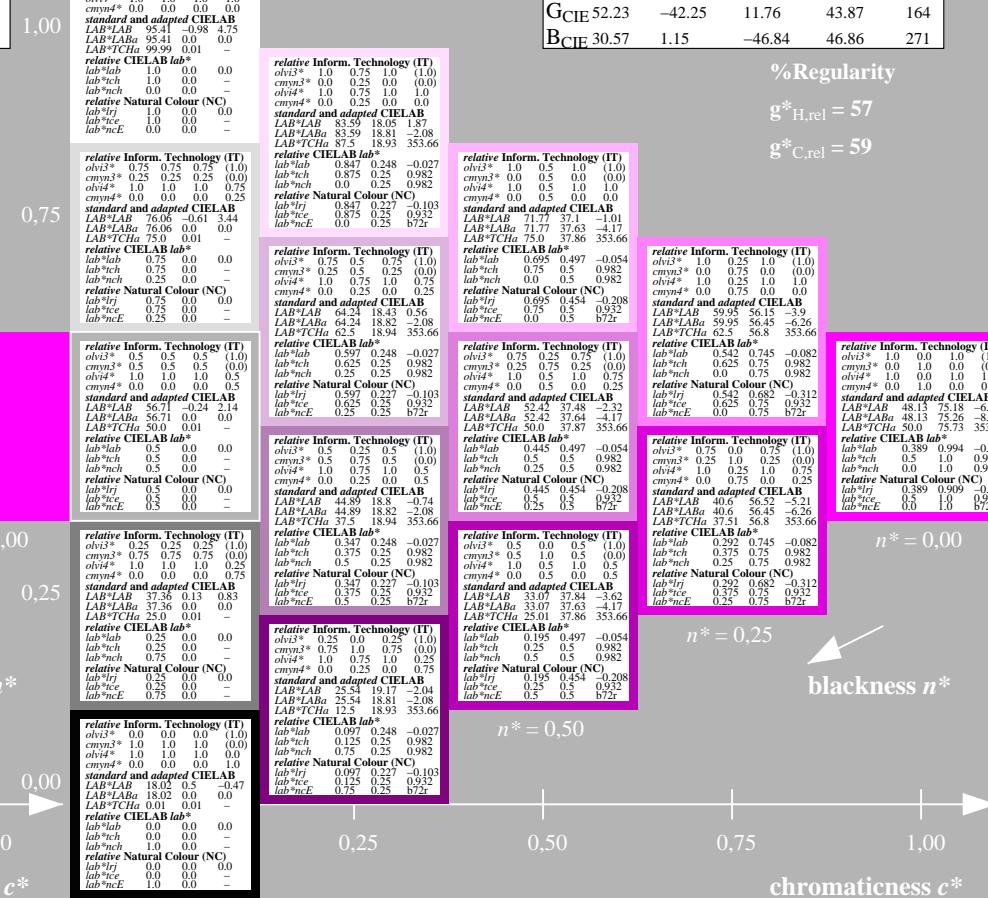
olv*Ma: 1.0 0.0 1.0

triangle lightnes



ORS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	$a^* = a^*_a$	$b^* = b^*_a$	$C^*_{ab,a}$	h^*_{ab}
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.66	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

% Regularity



BAM registration: 20060101-NE47/110Q/Q47E05FP.PS/.PDF - application for evaluation and measurement of printer or monitor

NE47// Form: 6/10, Serie:

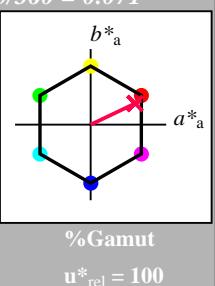
Page: count: 6

-8

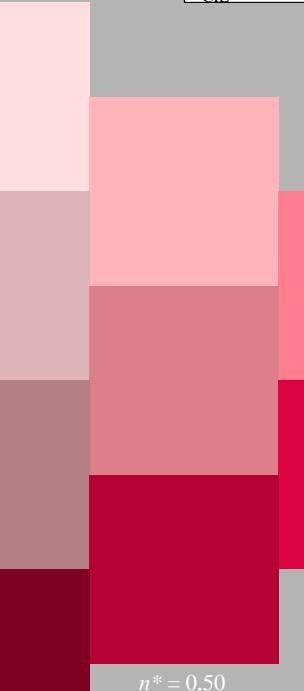


Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 25/360 = 0.071$
 lab^*tch and lab^*nch

D65: hue R
LCH*Ma: 57 74 25
olv*Ma: 1.0 0.0 0.09
triangle lightness



SRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	
O _{Ma}	56.71	67.03	38.7	77.4	30
Y _{Ma}	56.71	0.0	77.4	77.4	90
L _{Ma}	56.71	-67.02	38.7	77.4	150
C _{Ma}	56.71	-67.02	-38.69	77.4	210
V _{Ma}	56.71	0.0	-77.39	77.4	270
M _{Ma}	56.71	67.03	-38.69	77.4	330
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

1,00

0,75

0,50

0,25

0,00

-0,25

-0,50

-0,75

-1,00

$n^* = 0,00$

$n^* = 0,25$

blackness n^*

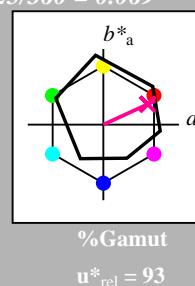
0,00

chromaticness c^*

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 25/360 = 0.069$

lab^*tch and lab^*nch



ORS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	
O _{Ma}	47.94	65.39	50.52	82.63	38
Y _{Ma}	90.37	-10.26	91.75	92.32	96
L _{Ma}	50.9	-62.83	34.96	71.91	151
C _{Ma}	58.62	-30.34	-45.01	54.3	236
V _{Ma}	25.72	31.1	-44.4	54.22	305
M _{Ma}	48.13	75.28	-8.36	75.74	354
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	26.98	64.57	25
J _{CIE}	81.26	-2.16	67.76	67.79	92
G _{CIE}	52.23	-42.25	11.76	43.87	164
B _{CIE}	30.57	1.15	-46.84	46.86	271

%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Inform. Technology (IT)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative Natural Colour (NC)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Natural Colour (NC)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

standard and adapted CIELAB				
	olv^3*	olv^2*	olv^1*	olv^0*
standard and adapted CIELAB	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative Inform. Technology (IT)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Inform. Technology (IT)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative Natural Colour (NC)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Natural Colour (NC)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

standard and adapted CIELAB				
	olv^3*	olv^2*	olv^1*	olv^0*
standard and adapted CIELAB	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative CIELAB lab*				
	olv^3*	olv^2*	olv^1*	olv^0*
relative CIELAB lab*	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

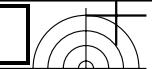
relative Inform. Technology (IT)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Inform. Technology (IT)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative Natural Colour (NC)				
	olv^3*	olv^2*	olv^1*	olv^0*
relative Natural Colour (NC)	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

standard and adapted CIELAB				
	olv^3*	olv^2*	olv^1*	olv^0*
standard and adapted CIELAB	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

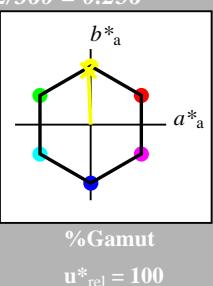
relative CIELAB lab*				
	olv^3*	olv^2*	olv^1*	olv^0*
relative CIELAB lab*	0.75	0.75	0.75	1.00
olv^3*	0.25	0.25	0.25	0.00
olv^2*	1.0	1.0	0.75	0.00
olv^1*	0.0	0.0	0.0	0.00
olv^0*	0.0	0.0	0.0	0.00

relative Inform. Technology (IT)				
	olv^3*	olv^2*	olv^1*	olv^0*



Input: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 92/360 = 0.256$
 lab^*tch and lab^*nch

D65: hue J
LCH*Ma: 57 76 92
olv*Ma: 0.95 1.0 0.0
triangle lightness



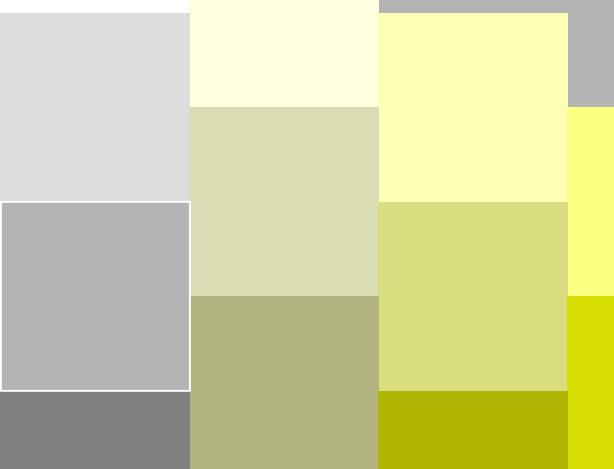
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	56.71	67.03	38.7	77.4	30
Y _{Ma}	56.71	0.0	77.4	77.4	90
L _{Ma}	56.71	-67.02	38.7	77.4	150
C _{Ma}	56.71	-67.02	-38.69	77.4	210
V _{Ma}	56.71	0.0	-77.39	77.4	270
M _{Ma}	56.71	67.03	-38.69	77.4	330
N _{Ma}	18.01	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
J _{CIE}	81.26	-2.88	71.56	71.62	92
G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



%Regularity

$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$



%Regularity

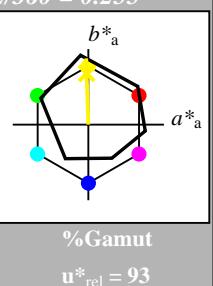
$g^*_{H,rel} = 100$

$g^*_{C,rel} = 100$

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

lab^*tch and lab^*nch



%Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 59$

relative Inform. Technology (IT)

olv^3* 1.0 1.0 1.0 (1,0)
 $cmy3*$ 0.0 0.0 0.0 (0,0)
 olv^4* 1.0 1.0 1.0
 $cmy4*$ 0.0 0.0 0.0

standard and adapted CIELAB

LAB^*LAB 93.1 -0.64 47.5
 LAB^*TCh 95.41 0.00 0.0
 LAB^*TCh 99.99 0.01 0

relative CIELAB lab*

olv^3* 1.0 0.0 0.0
 olv^4* 1.0 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nch 1.0 0.0 0.0

relative Inform. Technology (IT)

olv^3* 1.0 0.025 0.25 (1,0)
 $cmy3*$ 0.0 0.025 0.25 (0,0)
 olv^4* 1.0 0.025 0.25
 $cmy4*$ 0.0 0.025 0.25

relative Natural Colour (NC)

olv^3* 1.0 0.0 0.0
 olv^4* 1.0 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nCh 1.0 0.0 0.0

LAB^*LAB 93.1 -0.7 21.92
 LAB^*TCh 87.5 23.19 91.85

relative CIELAB lab*

olv^3* 1.0 0.0 0.0
 olv^4* 1.0 0.0 0.0
 lab^*tch 1.0 0.0 0.0
 lab^*nch 1.0 0.0 0.0

relative Inform. Technology (IT)

olv^3* 1.0 0.05 0.5 (1,0)
 $cmy3*$ 0.0 0.045 0.5 (0,0)
 olv^4* 1.0 0.05 0.5
 $cmy4*$ 0.0 0.045 0.5

standard and adapted CIELAB

LAB^*LAB 76.06 -0.61 3.44
 LAB^*TCh 76.06 0.00 0.0
 LAB^*TCh 75.01 0.00 0.0

relative CIELAB lab*

olv^3* 0.75 0.25 0.75 (1,0)
 $cmy3*$ 0.25 0.25 0.75 (0,0)
 olv^4* 1.0 1.0 0.75
 $cmy4*$ 0.0 0.0 0.75

relative Natural Colour (NC)

olv^3* 0.0 0.025 0.25
 olv^4* 0.0 0.025 0.25
 lab^*tch 0.75 0.0 0.0
 lab^*nCh 0.25 0.0 0.0

LAB^*LAB 93.1 -0.23 48.29
 LAB^*TCh 90.8 -1.4 43.84
 LAB^*TCh 83.86 91.85

relative CIELAB lab*

olv^3* 0.94 0.0 0.015 0.25
 olv^4* 0.94 0.0 0.015 0.25
 lab^*tch 0.94 0.0 0.015 0.25
 lab^*nch 0.0 0.25 0.25 0.25

relative Inform. Technology (IT)

olv^3* 0.0 0.074 0.75 (1,0)
 $cmy3*$ 0.0 0.074 0.75 (0,0)
 olv^4* 0.0 0.074 0.75
 $cmy4*$ 0.0 0.074 0.75

relative Natural Colour (NC)

olv^3* 0.94 0.0 0.5
 olv^4* 0.94 0.0 0.5
 lab^*tch 0.75 0.0 0.0
 lab^*nCh 0.25 0.0 0.0

LAB^*LAB 93.1 -1.27 25.22
 LAB^*TCh 87.5 21.93 91.84

relative CIELAB lab*

olv^3* 0.72 0.0 0.007 0.25
 olv^4* 0.72 0.0 0.007 0.25
 lab^*tch 0.25 0.25 0.25 0.25
 lab^*nch 0.25 0.25 0.25 0.25

relative Inform. Technology (IT)

olv^3* 0.0 0.049 0.25 (1,0)
 $cmy3*$ 0.0 0.049 0.25 (0,0)
 olv^4* 0.0 0.049 0.25
 $cmy4*$ 0.0 0.049 0.25

relative Natural Colour (NC)

olv^3* 0.72 0.0 0.25
 olv^4* 0.72 0.0 0.25
 lab^*tch 0.25 0.25 0.25 0.25
 lab^*nCh 0.25 0.25 0.25 0.25

LAB^*LAB 71.45 -1.92 46.98
 LAB^*TCh 62.5 21.93 91.84

relative CIELAB lab*

olv^3* 0.72 0.0 0.007 0.25
 olv^4* 0.72 0.0 0.007 0.25
 lab^*tch 0.25 0.25 0.25 0.25
 lab^*nch 0.25 0.25 0.25 0.25

relative Inform. Technology (IT)

olv^3* 0.0 0.049 0.25 (1,0)
 $cmy3*$ 0.0 0.049 0.25 (0,0)
 olv^4* 0.0 0.049 0.25
 $cmy4*$ 0.0 0.049 0.25

relative Natural Colour (NC)

olv^3* 0.69 0.0 0.25
 olv^4* 0.69 0.0 0.25
 lab^*tch 0.25 0.25 0.25 0.25
 lab^*nCh 0.25 0.25 0.25 0.25

LAB^*LAB 64.14 -2.1 65.76
 LAB^*TCh 62.5 21.93 91.84

relative CIELAB lab*

olv^3* 0.911 0.0 0.023 0.75
 olv^4* 0.911 0.0 0.023 0.75
 lab^*tch 0.0 0.75 0.75 0.75
 lab^*nch 0.0 0.75 0.75 0.75

relative Inform. Technology (IT)

olv^3* 0.0 0.074 0.75 (1,0)
 $cmy3*$ 0.0 0.074 0.75 (0,0)
 olv^4* 0.0 0.074 0.75
 $cmy4*$ 0.0 0.074 0.75

relative Natural Colour (NC)

olv^3* 0.911 0.0 0.75
 olv^4* 0.911 0.0 0.75
 lab^*tch 0.0 0.75 0.75 0.75
 lab^*nCh 0.0 0.75 0.75 0.75

LAB^*LAB 88.49 -2.96 70.05
 LAB^*TCh 84.19 -2.96 65.76

relative CIELAB lab*

olv^3* 0.911 0.0 0.003 0.75
 olv^4* 0.911 0.0 0.003 0.75
 lab^*tch 0.0 0.75 0.75 0.75
 lab^*nch 0.0 0.75 0.75 0.75

relative Inform. Technology (IT)

olv^3* 0.0 0.098 1.0 (1,0)
 $cmy3*$ 0.0 0.098 1.0 (0,0)
 olv^4* 0.0 0.098 1.0
 $cmy4*$ 0.0 0.098 1.0

relative Natural Colour (NC)

olv^3* 0.911 0.0 1.0
 olv^4* 0.911 0.0 1.0
 lab^*tch 0.0 1.0 0.0 0.0
 lab^*nCh 0.0 1.0 0.0 0.0

LAB^*LAB 86.19 -3.62 91.84
 LAB^*TCh 84.81 -3.62 91.84

relative CIELAB lab*

olv^3* 0.661 0.0 0.023 0.75
 olv^4* 0.661 0.0 0.023 0.75
 lab^*tch 0.375 0.75 0.75 0.75
 lab^*nch 0.375 0.75 0.75 0.75

relative Inform. Technology (IT)

olv^3* 0.0 0.025 0.75 (1,0)
 $cmy3*$ 0.0 0.025 0.75 (0,0)
 olv^4* 0.0 0.025 0.75
 $cmy4*$ 0.0 0.025 0.75

relative Natural Colour (NC)

olv^3* 0.661 0.0 0.75
 olv^4* 0.661 0.0 0.75
 lab^*tch 0.375 0.75 0.75 0.75
 lab^*nCh 0.375 0.75 0.75 0.75

LAB^*LAB 52.1 -1.39 43.83
 LAB^*TCh 43.86 91.84

relative CIELAB lab*

olv^3* 0.44 0.0 0.005 0.5
 olv^4* 0.44 0.0 0.005 0.5
 lab^*tch 0.25 0.25 0.25 0.25
 lab^*nch 0.25 0.25 0.25 0.25

relative Inform. Technology (IT)

olv^3* 0.0 0.025 0.5 (1,0)
 $cmy3*$ 0.0 0.025 0.5 (0,0)
 olv^4* 0.0 0.025 0.5
 $cmy4*$ 0.0 0.025 0.5

relative Natural Colour (NC)

olv^3* 0.22 0.0 0.25
 olv^4* 0.22 0.0 0.25
 lab^*tch 0.75 0.25 0.25 0.25
 lab^*nCh 0.75 0.25 0.25 0.25

LAB^*LAB 35.06 -0.52 22.59
 LAB^*TCh 32.25 -0.52 21.92

relative CIELAB lab*

olv^3* 0.22 0.0 0.007 0.25
 olv^4* 0.22 0.0 0.007 0.25
 lab^*tch 0.75 0.25 0.25 0.25
 lab^*nch 0.75 0.25 0.25 0.25

relative Inform. Technology (IT)

olv^3* 0.0 0.025 0.25 (1,0)
 $cmy3*$ 0.0 0.025 0.25 (0,0)
 olv^4* 0.0 0.025 0.25
 $cmy4*$ 0.0 0.025 0.25

relative Natural Colour (NC)

olv^3* 0.22 0.0 0.25
 olv^4* 0.22 0.0 0.25
 lab^*tch 0.75 0.25 0.25 0.25
 lab^*nCh 0.75 0.25 0.25 0.25

LAB^*LAB 35.06 -0.52 22.59
 LAB^*TCh 32.25 -0.52 21.92

$n^* = 1,0$

$n^* = 1,0$

5 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart NE47; Colorimetric systems SRS18 & ORS18

D65: 5 step colour scales and coordinate data for 10 hues

input: $olv^* setrgbcolor$

output: $olv^* setrgbcolor / w^* setgray$

Page: count: 8

Page: 8

N/

E

Y

O

M

C

V

L

W

H

I

J

K

P

F

D

B

A

M

S

T

U

V

W

X

Y

Z

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2

3

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5

6

7

8

9

0

1

2

3

4

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6

