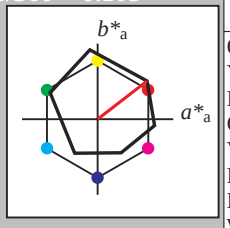
Input: Colorimetric Offset Reflective System ORS18
for hue *h = lab*h = 38/360 = 0.105**
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 48 83 38
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 0.5 (1.0)
*cmyn3** 0.0 0.5 0.5 (0.0)
*olvi4** 1.0 0.5 0.5 1.0
*cmyn4** 0.0 0.5 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 71.67 32.15 28.41
*LAB*LABa* 71.67 32.69 25.25
*LAB*TCHa* 75.0 41.31 37.69
relative* CIELAB *lab*
*lab*lab* 0.693 0.396 0.306
*lab*tch* 0.75 0.5 0.105
*lab*nch* 0.0 0.5 0.105
***relative* Natural Colour (NC)**
*lab*lrj* 0.693 0.477 0.15
*lab*tce* 0.75 0.5 0.048
*lab*ncE* 0.0 0.5 r19j

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.0 (1.0)
*cmyn3** 0.5 1.0 1.0 (0.0)
*olvi4** 1.0 0.5 0.5 0.5
*cmyn4** 0.0 0.5 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 32.98 32.9 25.8
*LAB*LABa* 32.98 32.69 25.25
*LAB*TCHa* 25.01 41.31 37.69
relative* CIELAB *lab*
*lab*lab* 0.193 0.396 0.306
*lab*tch* 0.25 0.5 0.105
*lab*nch* 0.5 0.5 0.105
***relative* Natural Colour (NC)**
*lab*lrj* 0.193 0.477 0.15
*lab*tce* 0.25 0.5 0.048
*lab*ncE* 0.5 0.5 r19j

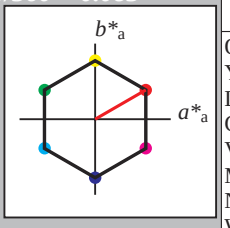
***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 0.0 (1.0)
*cmyn3** 0.0 1.0 1.0 (0.0)
*olvi4** 1.0 0.0 0.0 1.0
*cmyn4** 0.0 1.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 47.94 65.3 52.06
*LAB*LABa* 47.94 65.37 50.51
*LAB*TCHa* 50.0 82.61 37.69
relative* CIELAB *lab*
*lab*lab* 0.387 0.791 0.611
*lab*tch* 0.5 1.0 0.105
*lab*nch* 0.0 1.0 0.105
***relative* Natural Colour (NC)**
*lab*lrj* 0.387 0.954 0.299
*lab*tce* 0.5 1.0 0.048
*lab*ncE* 0.0 1.0 r19j

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

Output: Colorimetric Standard Reflective System SRS18
for hue *h = lab*h = 30/360 = 0.083**
lab*tch* and *lab*nch

D65: hue O
LCH*Ma: 57 77 30
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 0.5 (1.0)
*cmyn3** 0.0 0.5 0.5 (0.0)
*olvi4** 1.0 0.5 0.5 1.0
*cmyn4** 0.0 0.5 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 33.51 19.35
*LAB*LABa* 76.06 33.51 19.35
*LAB*TCHa* 75.0 38.69 30.0
relative* CIELAB *lab*
*lab*lab* 0.75 0.433 0.25
*lab*tch* 0.75 0.5 0.083
*lab*nch* 0.0 0.5 0.083
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.497 0.053
*lab*tce* 0.75 0.5 0.017
*lab*ncE* 0.0 0.5 r06j

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.0 (1.0)
*cmyn3** 0.5 1.0 1.0 (0.0)
*olvi4** 1.0 0.5 0.5 0.5
*cmyn4** 0.0 0.5 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 33.51 19.35
*LAB*LABa* 37.36 33.51 19.35
*LAB*TCHa* 25.01 38.69 30.0
relative* CIELAB *lab*
*lab*lab* 0.25 0.433 0.25
*lab*tch* 0.25 0.5 0.083
*lab*nch* 0.5 0.5 0.083
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.497 0.053
*lab*tce* 0.25 0.5 0.017
*lab*ncE* 0.5 0.5 r06j

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 0.0 (1.0)
*cmyn3** 0.0 1.0 1.0 (0.0)
*olvi4** 1.0 0.0 0.0 1.0
*cmyn4** 0.0 1.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 67.02 38.69
*LAB*LABa* 56.71 67.02 38.69
*LAB*TCHa* 50.0 77.38 30.0
relative* CIELAB *lab*
*lab*lab* 0.5 0.866 0.5
*lab*tch* 0.5 1.0 0.083
*lab*nch* 0.0 1.0 0.083
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.994 0.106
*lab*tce* 0.5 1.0 0.017
*lab*ncE* 0.0 1.0 r06j

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

OE120−7, 3 step scales for constant CIELAB hue 38/360 = 0.105 (left)
3 step scales for constant CIELAB hue 30/360 = 0.083 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

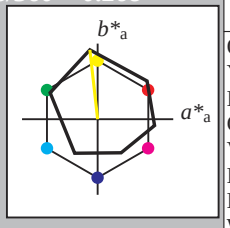
BAM registration: 20060101-OE12/10Q/Q12E00FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 1/10, Serie: 1/1, Page: 1 Page: count: 1

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 96/360 = 0.268$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 90 92 96
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0	1.0
*cmyn4**	0.0	0.0	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	−0.98	4.75
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.5	(1.0)
*cmyn3**	0.0	0.0	0.5	(0.0)
*olvi4**	1.0	1.0	0.5	1.0
*cmyn4**	0.0	0.0	0.5	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	92.88	−6.06	50.46
*LAB*LABa*	92.88	−5.12	45.87
*LAB*TCHa*	75.0	46.15	96.38

relative* CIELAB *lab*

*lab*lab*	0.967	−0.055	0.497
*lab*tch*	0.75	0.5	0.268
*lab*nch*	0.0	0.5	0.268

***relative* Natural Colour (NC)**

*lab*lrj*	0.967	−0.048	0.497
*lab*tce*	0.75	0.5	0.266
*lab*ncE*	0.0	0.5	j06g

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.0	(1.0)
*cmyn3**	0.0	0.0	1.0	(0.0)
*olvi4**	1.0	1.0	0.0	1.0
*cmyn4**	0.0	0.0	1.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	90.36	−11.15	96.15
*LAB*LABa*	90.36	−10.25	91.73
*LAB*TCHa*	50.0	92.3	96.38

relative* CIELAB *lab*

*lab*lab*	0.935	−0.11	0.994
*lab*tch*	0.5	1.0	0.268
*lab*nch*	0.0	1.0	0.268

***relative* Natural Colour (NC)**

*lab*lrj*	0.935	−0.097	0.995
*lab*tce*	0.5	1.0	0.266
*lab*ncE*	0.0	1.0	j06g

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.5	(1.0)
*cmyn3**	0.5	0.5	0.5	(0.0)
*olvi4**	1.0	1.0	1.0	0.5
*cmyn4**	0.0	0.0	0.0	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	56.71	−0.24	2.14
*LAB*LABa*	56.71	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.0	(1.0)
*cmyn3**	0.5	0.5	1.0	(0.0)
*olvi4**	1.0	1.0	0.5	0.5
*cmyn4**	0.0	0.0	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	54.19	−5.32	47.84
*LAB*LABa*	54.19	−5.12	45.87
*LAB*TCHa*	25.01	46.15	96.38

relative* CIELAB *lab*

*lab*lab*	0.467	−0.055	0.497
*lab*tch*	0.25	0.5	0.268
*lab*nch*	0.5	0.5	0.268

***relative* Natural Colour (NC)**

*lab*lrj*	0.467	−0.048	0.497
*lab*tce*	0.25	0.5	0.266
*lab*ncE*	0.5	0.5	j06g

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	18.02	0.5	−0.47
*LAB*LABa*	18.02	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

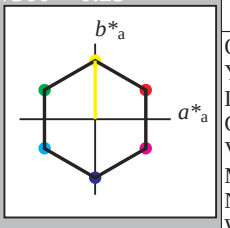
$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 90/360 = 0.25$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 57 77 90
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0	1.0
*cmyn4**	0.0	0.0	0.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	95.41	0.0	0.0
*LAB*LABa*	95.41	0.0	0.0
*LAB*TCHa*	99.99	0.01	–

relative* CIELAB *lab*

*lab*lab*	1.0	0.0	0.0
*lab*tch*	1.0	0.0	–
*lab*nch*	0.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	1.0	0.0	0.0
*lab*tce*	1.0	0.0	–
*lab*ncE*	0.0	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.5	(1.0)
*cmyn3**	0.0	0.0	0.5	(0.0)
*olvi4**	1.0	1.0	0.5	1.0
*cmyn4**	0.0	0.0	0.5	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	76.06	0.0	38.69
*LAB*LABa*	76.06	0.0	38.69
*LAB*TCHa*	75.0	38.69	90.0

relative* CIELAB *lab*

*lab*lab*	0.75	0.0	0.5
*lab*tch*	0.75	0.5	0.25
*lab*nch*	0.0	0.5	0.25

***relative* Natural Colour (NC)**

*lab*lrj*	0.75	0.027	0.499
*lab*tce*	0.75	0.5	0.241
*lab*ncE*	0.0	0.5	r96j

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.0	(1.0)
*cmyn3**	0.0	0.0	1.0	(0.0)
*olvi4**	1.0	1.0	0.0	1.0
*cmyn4**	0.0	0.0	1.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	56.72	0.0	0.0
*LAB*LABa*	56.72	0.0	0.0
*LAB*TCHa*	50.0	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	0.0
*lab*tch*	0.5	0.0	–
*lab*nch*	0.5	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.0	0.0
*lab*tce*	0.5	0.0	–
*lab*ncE*	0.5	0.0	–

***relative* Inform. Technology (IT)**

*olvi3**	0.5	0.5	0.0	(1.0)
*cmyn3**	0.5	0.5	1.0	(0.0)
*olvi4**	1.0	1.0	0.5	0.5
*cmyn4**	0.0	0.0	0.5	0.5

***standard* and *adapted* CIELAB**

*LAB*LAB*	37.36	0.0	38.69
*LAB*LABa*	37.36	0.0	38.69
*LAB*TCHa*	25.01	38.69	90.0

relative* CIELAB *lab*

*lab*lab*	0.25	0.0	0.5
*lab*tch*	0.25	0.5	0.25
*lab*nch*	0.5	0.5	0.25

***relative* Natural Colour (NC)**

*lab*lrj*	0.25	0.027	0.499
*lab*tce*	0.25	0.5	0.241
*lab*ncE*	0.5	0.5	r96j

***relative* Inform. Technology (IT)**

*olvi3**	1.0	1.0	0.0	(1.0)
*cmyn3**	0.0	0.0	1.0	(0.0)
*olvi4**	1.0	1.0	0.0	1.0
*cmyn4**	0.0	0.0	1.0	0.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	56.71	0.0	77.38
*LAB*LABa*	56.71	0.0	77.38
*LAB*TCHa*	50.0	77.38	90.0

relative* CIELAB *lab*

*lab*lab*	0.5	0.0	1.0
*lab*tch*	0.5	1.0	0.25
*lab*nch*	0.0	1.0	0.25

***relative* Natural Colour (NC)**

*lab*lrj*	0.5	0.054	0.998
*lab*tce*	0.5	1.0	0.241
*lab*ncE*	0.0	1.0	r96j

***relative* Inform. Technology (IT)**

*olvi3**	0.0	0.0	0.0	(1.0)
*cmyn3**	1.0	1.0	1.0	(0.0)
*olvi4**	1.0	1.0	1.0	0.0
*cmyn4**	0.0	0.0	0.0	1.0

***standard* and *adapted* CIELAB**

*LAB*LAB*	18.03	0.0	0.0
*LAB*LABa*	18.03	0.0	0.0
*LAB*TCHa*	0.01	0.01	–

relative* CIELAB *lab*

*lab*lab*	0.0	0.0	0.0
*lab*tch*	0.0	0.0	–
*lab*nch*	1.0	0.0	–

***relative* Natural Colour (NC)**

*lab*lrj*	0.0	0.0	0.0
*lab*tce*	0.0	0.0	–
*lab*ncE*	1.0	0.0	–

$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

OE120−7, 3 step scales for constant CIELAB hue 96/360 = 0.268 (left)
3 step scales for constant CIELAB hue 90/360 = 0.25 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

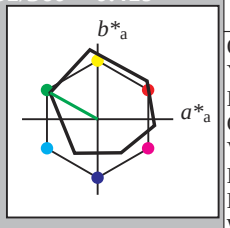
See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E01FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 2/10, Serie: 1/1, Page: 2 Page: count: 2

Input: Colorimetric Offset Reflective System ORS18
for hue *h = lab*h = 151/360 = 0.419**
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 51 72 151
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.5 (1.0)
*cmyn3** 0.5 0.0 0.5 (0.0)
*olvi4** 0.5 1.0 0.5 1.0
*cmyn4** 0.5 0.0 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 73.15 −31.96 20.73
*LAB*LABa* 73.15 −31.4 17.48
*LAB*TCHa* 75.0 35.95 150.91
relative* CIELAB *lab*
*lab*lab* 0.712 −0.436 0.243
*lab*tch* 0.75 0.5 0.419
*lab*nch* 0.0 0.5 0.419
***relative* Natural Colour (NC)**
*lab*lrj* 0.712 −0.478 0.144
*lab*tce* 0.75 0.5 0.453
*lab*ncE* 0.0 0.5 j81g

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 0.0 (1.0)
*cmyn3** 1.0 0.0 1.0 (0.0)
*olvi4** 0.0 1.0 0.0 1.0
*cmyn4** 1.0 0.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 50.9 −62.95 36.7
*LAB*LABa* 50.9 −62.81 34.95
*LAB*TCHa* 50.0 71.89 150.91
relative* CIELAB *lab*
*lab*lab* 0.425 −0.873 0.486
*lab*tch* 0.5 1.0 0.419
*lab*nch* 0.0 1.0 0.419
***relative* Natural Colour (NC)**
*lab*lrj* 0.425 −0.956 0.289
*lab*tce* 0.5 1.0 0.453
*lab*ncE* 0.0 1.0 j81g

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.0 (1.0)
*cmyn3** 1.0 0.5 1.0 (0.0)
*olvi4** 0.5 1.0 0.5 0.5
*cmyn4** 0.5 0.0 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 34.46 −31.22 18.12
*LAB*LABa* 34.46 −31.4 17.48
*LAB*TCHa* 25.01 35.95 150.91
relative* CIELAB *lab*
*lab*lab* 0.213 −0.436 0.243
*lab*tch* 0.25 0.5 0.419
*lab*nch* 0.5 0.5 0.419
***relative* Natural Colour (NC)**
*lab*lrj* 0.213 −0.478 0.144
*lab*tce* 0.25 0.5 0.453
*lab*ncE* 0.5 0.5 j81g

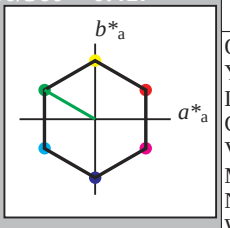
***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

Output: Colorimetric Standard Reflective System SRS18
for hue *h = lab*h = 150/360 = 0.417**
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 57 77 150
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.5 (1.0)
*cmyn3** 0.5 0.0 0.5 (0.0)
*olvi4** 0.5 1.0 0.5 1.0
*cmyn4** 0.5 0.0 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 −33.5 19.35
*LAB*LABa* 76.06 −33.5 19.35
*LAB*TCHa* 75.0 38.69 150.0
relative* CIELAB *lab*
*lab*lab* 0.75 −0.432 0.25
*lab*tch* 0.75 0.5 0.417
*lab*nch* 0.0 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 −0.48 0.136
*lab*tce* 0.75 0.5 0.456
*lab*ncE* 0.0 0.5 j82g

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 0.0 (1.0)
*cmyn3** 1.0 0.0 1.0 (0.0)
*olvi4** 0.0 1.0 0.0 1.0
*cmyn4** 1.0 0.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −67.01 38.69
*LAB*LABa* 56.71 −67.01 38.69
*LAB*TCHa* 50.0 77.38 150.0
relative* CIELAB *lab*
*lab*lab* 0.5 −0.865 0.5
*lab*tch* 0.5 1.0 0.417
*lab*nch* 0.0 1.0 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.961 0.271
*lab*tce* 0.5 1.0 0.456
*lab*ncE* 0.0 1.0 j82g

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.0 (1.0)
*cmyn3** 1.0 0.5 1.0 (0.0)
*olvi4** 0.5 1.0 0.5 0.5
*cmyn4** 0.5 0.0 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 −33.5 19.35
*LAB*LABa* 37.36 −33.5 19.35
*LAB*TCHa* 25.01 38.69 150.0
relative* CIELAB *lab*
*lab*lab* 0.25 −0.432 0.25
*lab*tch* 0.25 0.5 0.417
*lab*nch* 0.5 0.5 0.417
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.48 0.136
*lab*tce* 0.25 0.5 0.456
*lab*ncE* 0.5 0.5 j82g

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

OE120−7, 3 step scales for constant CIELAB hue 151/360 = 0.419 (left)
3 step scales for constant CIELAB hue 150/360 = 0.417 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E02FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 3/10, Serie: 1/1, Page: 3 Page: count: 3

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

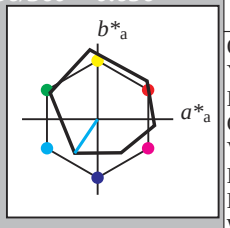
BAM registration: 20060101-OE12/10Q/Q12E03FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 4/10, Serie: 1/1, Page: 4 Page: count: 4

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 59 54 236
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

$n^* = 1{,}0$

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 1.0 (1.0)
*cmyn3** 0.5 0.0 0.0 (0.0)
*olvi4** 0.5 1.0 1.0 1.0
*cmyn4** 0.5 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 77.01 −15.8 −18.98
*LAB*LABa* 77.01 −15.16 −22.5
*LAB*TCHa* 75.0 27.14 236.02
relative* CIELAB *lab*
*lab*lab* 0.762 −0.278 −0.414
*lab*tch* 0.75 0.5 0.656
*lab*nch* 0.0 0.5 0.656
***relative* Natural Colour (NC)**
*lab*lrj* 0.762 −0.247 −0.433
*lab*tce* 0.75 0.5 0.667
*lab*ncE* 0.0 0.5 g66b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.5 (1.0)
*cmyn3** 1.0 0.5 0.5 (0.0)
*olvi4** 0.5 1.0 1.0 0.5
*cmyn4** 0.5 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 38.32 −15.05 −21.6
*LAB*LABa* 38.32 −15.16 −22.5
*LAB*TCHa* 25.01 27.14 236.02
relative* CIELAB *lab*
*lab*lab* 0.262 −0.278 −0.414
*lab*tch* 0.25 0.5 0.656
*lab*nch* 0.5 0.5 0.656
***relative* Natural Colour (NC)**
*lab*lrj* 0.262 −0.247 −0.433
*lab*tce* 0.25 0.5 0.667
*lab*ncE* 0.5 0.5 g66b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 1.0 (1.0)
*cmyn3** 1.0 0.0 0.0 (0.0)
*olvi4** 0.0 1.0 1.0 1.0
*cmyn4** 1.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 58.62 −30.61 −42.73
*LAB*LABa* 58.62 −30.33 −45.01
*LAB*TCHa* 50.0 54.29 236.02
relative* CIELAB *lab*
*lab*lab* 0.525 −0.558 −0.828
*lab*tch* 0.5 1.0 0.656
*lab*nch* 0.0 1.0 0.656
***relative* Natural Colour (NC)**
*lab*lrj* 0.525 −0.496 −0.867
*lab*tce* 0.5 1.0 0.667
*lab*ncE* 0.0 1.0 g66b

$n^* = 0{,}00$

blackness n^*

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

chromaticness c^*

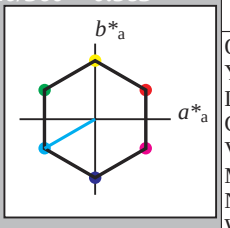
OE120−7, 3 step scales for constant CIELAB hue 236/360 = 0.656 (left)

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 210/360 = 0.583$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 57 77 210
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

$n^* = 1{,}0$

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 1.0 (1.0)
*cmyn3** 0.5 0.0 0.0 (0.0)
*olvi4** 0.5 1.0 1.0 1.0
*cmyn4** 0.5 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 −33.5 −19.34
*LAB*LABa* 76.06 −33.5 −19.34
*LAB*TCHa* 75.0 38.69 210.0
relative* CIELAB *lab*
*lab*lab* 0.75 −0.432 −0.249
*lab*tch* 0.75 0.5 0.583
*lab*nch* 0.0 0.5 0.583
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 −0.386 −0.315
*lab*tce* 0.75 0.5 0.609
*lab*ncE* 0.0 0.5 g43b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.5 (1.0)
*cmyn3** 1.0 0.5 0.5 (0.0)
*olvi4** 0.5 1.0 1.0 0.5
*cmyn4** 0.5 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 −33.5 −19.34
*LAB*LABa* 37.36 −33.5 −19.34
*LAB*TCHa* 25.01 38.69 210.0
relative* CIELAB *lab*
*lab*lab* 0.25 −0.432 −0.249
*lab*tch* 0.25 0.5 0.583
*lab*nch* 0.5 0.5 0.583
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.386 −0.315
*lab*tce* 0.25 0.5 0.609
*lab*ncE* 0.5 0.5 g43b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 1.0 (1.0)
*cmyn3** 1.0 0.0 0.0 (0.0)
*olvi4** 0.0 1.0 1.0 1.0
*cmyn4** 1.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −67.01 −38.68
*LAB*LABa* 56.71 −67.01 −38.68
*LAB*TCHa* 50.0 77.38 210.0
relative* CIELAB *lab*
*lab*lab* 0.5 −0.865 −0.499
*lab*tch* 0.5 1.0 0.583
*lab*nch* 0.0 1.0 0.583
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.773 −0.632
*lab*tce* 0.5 1.0 0.609
*lab*ncE* 0.0 1.0 g43b

$n^* = 0{,}00$

blackness n^*

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

chromaticness c^*

3 step scales for constant CIELAB hue 210/360 = 0.583 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18 input: *cmy0* setcmykcolor*
D65: 2 coordinate data of 3 step colour scales for 10 hues output: *cmy0* / 000n* setcmykcolor*

www.ps.bam.de/OE12/10Q/Q12E04FP.PS/.PDF; linearized output
F: Output Linearization (OL) data OE12/10Q/Q12E04FP.DAT in File (F)

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

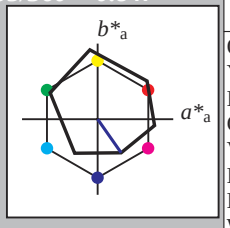
BAM registration: 20060101-OE12/10Q/Q12E04FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 5/10, Serie: 1/1, Page: 5 Page: count: 5

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 305/360 = 0.847$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 26 54 305
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 1.0 (1.0)
*cmyn3** 0.5 0.5 0.0 (0.0)
*olvi4** 0.5 0.5 1.0 1.0
*cmyn4** 0.5 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 60.56 15.23 −19.79
*LAB*LABa* 60.56 15.55 −22.19
*LAB*TCHa* 75.0 27.1 305.0
relative* CIELAB *lab*
*lab*lab* 0.55 0.287 −0.408
*lab*tch* 0.75 0.5 0.847
*lab*nch* 0.0 0.5 0.847
***relative* Natural Colour (NC)**
*lab*lrj* 0.55 0.225 −0.446
*lab*tce* 0.75 0.5 0.824
*lab*ncE* 0.0 0.5 b29r

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 1.0 (1.0)
*cmyn3** 1.0 1.0 0.0 (0.0)
*olvi4** 0.0 0.0 1.0 1.0
*cmyn4** 1.0 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 25.73 31.44 −44.34
*LAB*LABa* 25.73 31.09 −44.39
*LAB*TCHa* 50.0 54.21 305.0
relative* CIELAB *lab*
*lab*lab* 0.1 0.573 −0.818
*lab*tch* 0.5 1.0 0.847
*lab*nch* 0.0 1.0 0.847
***relative* Natural Colour (NC)**
*lab*lrj* 0.1 0.449 −0.892
*lab*tce* 0.5 1.0 0.824
*lab*ncE* 0.0 1.0 b29r

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.5 (1.0)
*cmyn3** 1.0 1.0 0.5 (0.0)
*olvi4** 0.5 0.5 1.0 0.5
*cmyn4** 0.5 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 21.87 15.97 −22.4
*LAB*LABa* 21.87 15.55 −22.19
*LAB*TCHa* 25.01 27.1 305.0
relative* CIELAB *lab*
*lab*lab* 0.05 0.287 −0.408
*lab*tch* 0.25 0.5 0.847
*lab*nch* 0.5 0.5 0.847
***relative* Natural Colour (NC)**
*lab*lrj* 0.05 0.225 −0.446
*lab*tce* 0.25 0.5 0.824
*lab*ncE* 0.5 0.5 b29r

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

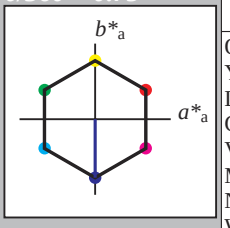
n^* = 0,00
blackness n^*
0,25 0,50 n^* = 0,50 0,75 1,00
chromaticness c^*
n^* = 1,0

Output: Colorimetric Standard Reflective System SRS18

for hue $h^* = lab^*h = 270/360 = 0.75$
*lab*tch* and *lab*nch*

D65: hue V
LCH*Ma: 57 77 270
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 1.0 (1.0)
*cmyn3** 0.5 0.5 0.0 (0.0)
*olvi4** 0.5 0.5 1.0 1.0
*cmyn4** 0.5 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 0.0 −38.68
*LAB*LABa* 76.06 0.0 −38.68
*LAB*TCHa* 75.0 38.69 270.0
relative* CIELAB *lab*
*lab*lab* 0.75 0.0 −0.499
*lab*tch* 0.75 0.5 0.75
*lab*nch* 0.0 0.5 0.75
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 −0.011 −0.499
*lab*tce* 0.75 0.5 0.746
*lab*ncE* 0.0 0.5 g98b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 1.0 (1.0)
*cmyn3** 1.0 1.0 0.0 (0.0)
*olvi4** 0.0 0.0 1.0 1.0
*cmyn4** 1.0 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 0.0 −77.37
*LAB*LABa* 56.71 0.0 −77.37
*LAB*TCHa* 50.0 77.38 270.0
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 −0.999
*lab*tch* 0.5 1.0 0.75
*lab*nch* 0.0 1.0 0.75
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.024 −0.998
*lab*tce* 0.5 1.0 0.746
*lab*ncE* 0.0 1.0 g98b

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.5 (1.0)
*cmyn3** 1.0 1.0 0.5 (0.0)
*olvi4** 0.5 0.5 1.0 0.5
*cmyn4** 0.5 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 0.0 −38.68
*LAB*LABa* 37.36 0.0 −38.68
*LAB*TCHa* 25.01 38.69 270.0
relative* CIELAB *lab*
*lab*lab* 0.25 0.0 −0.499
*lab*tch* 0.25 0.5 0.75
*lab*nch* 0.5 0.5 0.75
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.011 −0.499
*lab*tce* 0.25 0.5 0.746
*lab*ncE* 0.5 0.5 g98b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

n^* = 0,00
blackness n^*
0,25 0,50 n^* = 0,50 0,75 1,00
chromaticness c^*
n^* = 1,0

OE120−7, 3 step scales for constant CIELAB hue 305/360 = 0.847 (left)
3 step scales for constant CIELAB hue 270/360 = 0.75 (right)

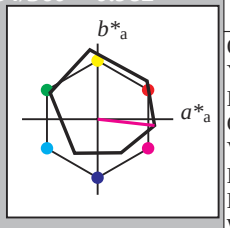
BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

Input: Colorimetric Offset Reflective System ORS18
for hue *h = lab*h = 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 lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***n** = 1,0*

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 1.0 (1.0)
*cmyn3** 0.0 0.5 0.0 (0.0)
*olvi4** 1.0 0.5 1.0 1.0
*cmyn4** 0.0 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 71.77 37.1 −1.01
*LAB*LABa* 71.77 37.63 −4.17
*LAB*TCHa* 75.0 37.86 353.66
relative* CIELAB *lab*
*lab*lab* 0.695 0.497 −0.054
*lab*tch* 0.75 0.5 0.982
*lab*nch* 0.0 0.5 0.982
***relative* Natural Colour (NC)**
*lab*lrj* 0.695 0.454 −0.208
*lab*tce* 0.75 0.5 0.932
*lab*ncE* 0.0 0.5 b72r

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.5 (1.0)
*cmyn3** 0.5 1.0 0.5 (0.0)
*olvi4** 1.0 0.5 1.0 0.5
*cmyn4** 0.0 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 33.07 37.84 −3.62
*LAB*LABa* 33.07 37.63 −4.17
*LAB*TCHa* 25.01 37.86 353.66
relative* CIELAB *lab*
*lab*lab* 0.195 0.497 −0.054
*lab*tch* 0.25 0.5 0.982
*lab*nch* 0.5 0.5 0.982
***relative* Natural Colour (NC)**
*lab*lrj* 0.195 0.454 −0.208
*lab*tce* 0.25 0.5 0.932
*lab*ncE* 0.5 0.5 b72r

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 1.0 (1.0)
*cmyn3** 0.0 1.0 0.0 (0.0)
*olvi4** 1.0 0.0 1.0 1.0
*cmyn4** 0.0 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 48.13 75.18 −6.79
*LAB*LABa* 48.13 75.26 −8.35
*LAB*TCHa* 50.0 75.73 353.66
relative* CIELAB *lab*
*lab*lab* 0.389 0.994 −0.109
*lab*tch* 0.5 1.0 0.982
*lab*nch* 0.0 1.0 0.982
***relative* Natural Colour (NC)**
*lab*lrj* 0.389 0.909 −0.416
*lab*tce* 0.5 1.0 0.932
*lab*ncE* 0.0 1.0 b72r

***n** = 0,00*

blackness *n**

0,25 0,50 ***n** = 0,50* 0,75 1,00

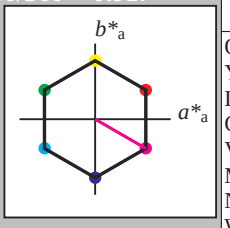
chromaticness *c**

OE120−7, 3 step scales for constant CIELAB hue 354/360 = 0.982 (left)

Output: 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 *t**



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***n** = 1,0*

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 1.0 (1.0)
*cmyn3** 0.0 0.5 0.0 (0.0)
*olvi4** 1.0 0.5 1.0 1.0
*cmyn4** 0.0 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 33.51 −19.34
*LAB*LABa* 76.06 33.51 −19.34
*LAB*TCHa* 75.0 38.69 330.0
relative* CIELAB *lab*
*lab*lab* 0.75 0.433 −0.249
*lab*tch* 0.75 0.5 0.917
*lab*nch* 0.0 0.5 0.917
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.36 −0.346
*lab*tce* 0.75 0.5 0.878
*lab*ncE* 0.0 0.5 b51r

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.5 (1.0)
*cmyn3** 0.5 1.0 0.5 (0.0)
*olvi4** 1.0 0.5 1.0 0.5
*cmyn4** 0.0 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 33.51 −19.34
*LAB*LABa* 37.36 33.51 −19.34
*LAB*TCHa* 25.01 38.69 330.0
relative* CIELAB *lab*
*lab*lab* 0.25 0.433 −0.249
*lab*tch* 0.25 0.5 0.917
*lab*nch* 0.5 0.5 0.917
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.36 −0.346
*lab*tce* 0.25 0.5 0.878
*lab*ncE* 0.5 0.5 b51r

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 1.0 (1.0)
*cmyn3** 0.0 1.0 0.0 (0.0)
*olvi4** 1.0 0.0 1.0 1.0
*cmyn4** 0.0 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 67.02 −38.68
*LAB*LABa* 56.71 67.02 −38.68
*LAB*TCHa* 50.0 77.38 330.0
relative* CIELAB *lab*
*lab*lab* 0.5 0.866 −0.499
*lab*tch* 0.5 1.0 0.917
*lab*nch* 0.0 1.0 0.917
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.72 −0.692
*lab*tce* 0.5 1.0 0.878
*lab*ncE* 0.0 1.0 b51r

***n** = 0,00*

blackness *n**

0,25 0,50 ***n** = 0,50* 0,75 1,00

chromaticness *c**

3 step scales for constant CIELAB hue 330/360 = 0.917 (right)

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

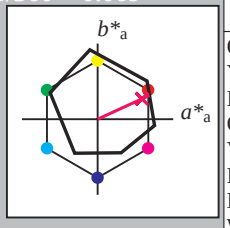
BAM registration: 20060101-OE12/10Q/Q12E05FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 6/10, Serie: 1/1, Page: 6 Page: count: 6

Input: Colorimetric Offset Reflective System ORS18

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

D65: hue R
LCH*Ma: 48 75 25
olv*Ma: 1.0 0.0 0.32

triangle lightness t^*



%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 0.661 (1.0)
*cmyn3** 0.0 0.5 0.339 (0.0)
*olvi4** 1.0 0.5 0.661 1.0
*cmyn4** 0.0 0.5 0.339 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 71.7 33.75 18.92
*LAB*LABa* 71.7 34.28 15.76
*LAB*TCHa* 75.0 37.73 24.7
relative* CIELAB *lab*
*lab*lab* 0.694 0.454 0.209
*lab*tch* 0.75 0.5 0.069
*lab*nch* 0.0 0.5 0.069
***relative* Natural Colour (NC)**
*lab*lrj* 0.694 0.5 0.0
*lab*tce* 0.75 0.5 1.0
*lab*ncE* 0.0 0.5 b99r

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 0.322 (1.0)
*cmyn3** 0.0 1.0 0.678 (0.0)
*olvi4** 1.0 0.0 0.322 1.0
*cmyn4** 0.0 1.0 0.678 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 48.0 68.48 33.09
*LAB*LABa* 48.0 68.56 31.53
*LAB*TCHa* 50.0 75.47 24.7
relative* CIELAB *lab*
*lab*lab* 0.388 0.908 0.418
*lab*tch* 0.5 1.0 0.069
*lab*nch* 0.0 1.0 0.069
***relative* Natural Colour (NC)**
*lab*lrj* 0.388 1.0 0.0
*lab*tce* 0.5 1.0 0.0
*lab*ncE* 0.0 1.0 r00j

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.161 (1.0)
*cmyn3** 0.5 1.0 0.839 (0.0)
*olvi4** 1.0 0.5 0.661 0.5
*cmyn4** 0.0 0.5 0.339 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 33.01 34.49 16.31
*LAB*LABa* 33.01 34.28 15.77
*LAB*TCHa* 25.01 37.73 24.7
relative* CIELAB *lab*
*lab*lab* 0.194 0.454 0.209
*lab*tch* 0.25 0.5 0.069
*lab*nch* 0.5 0.5 0.069
***relative* Natural Colour (NC)**
*lab*lrj* 0.194 0.5 0.0
*lab*tce* 0.25 0.5 0.0
*lab*ncE* 0.5 0.5 r00j

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

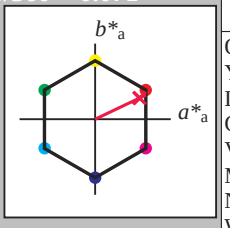
$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

Output: 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 t^*



%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.5 0.544 (1.0)
*cmyn3** 0.0 0.5 0.456 (0.0)
*olvi4** 1.0 0.5 0.544 1.0
*cmyn4** 0.0 0.5 0.456 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 33.51 15.97
*LAB*LABa* 76.06 33.51 15.97
*LAB*TCHa* 75.0 37.12 25.48
relative* CIELAB *lab*
*lab*lab* 0.75 0.451 0.215
*lab*tch* 0.75 0.5 0.071
*lab*nch* 0.0 0.5 0.071
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.5 0.0
*lab*tce* 0.75 0.5 1.0
*lab*ncE* 0.0 0.5 b99r

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.0 0.087 (1.0)
*cmyn3** 0.0 1.0 0.913 (0.0)
*olvi4** 1.0 0.0 0.087 1.0
*cmyn4** 0.0 1.0 0.913 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 67.02 31.94
*LAB*LABa* 56.71 67.02 31.94
*LAB*TCHa* 50.0 74.24 25.48
relative* CIELAB *lab*
*lab*lab* 0.5 0.903 0.43
*lab*tch* 0.5 1.0 0.071
*lab*nch* 0.0 1.0 0.071
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 1.0 0.0
*lab*tce* 0.5 1.0 0.0
*lab*ncE* 0.0 1.0 r00j

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.0 0.044 (1.0)
*cmyn3** 0.5 1.0 0.956 (0.0)
*olvi4** 1.0 0.5 0.544 0.5
*cmyn4** 0.0 0.5 0.456 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 33.51 15.97
*LAB*LABa* 37.36 33.51 15.97
*LAB*TCHa* 25.01 37.12 25.49
relative* CIELAB *lab*
*lab*lab* 0.25 0.451 0.215
*lab*tch* 0.25 0.5 0.071
*lab*nch* 0.5 0.5 0.071
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.5 0.0
*lab*tce* 0.25 0.5 0.0
*lab*ncE* 0.5 0.5 r00j

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

OE120−7, 3 step scales for constant CIELAB hue 25/360 = 0.069 (left)
3 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E06FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 7/10, Serie: 1/1, Page: 7 Page: count: 7

www.ps.bam.de/OE12/10Q/Q12E07FP.PS/.PDF; linearized output
F: Output Linearization (OL) data OE12/10Q/Q12E07FP.DAT in File (F)

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E07FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

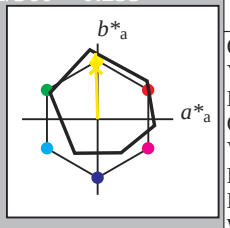
/OE12/ Form: 8/10, Serie: 1/1, Page: 8 Page: count: 8

Input: Colorimetric Offset Reflective System ORS18

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

D65: hue J
LCH*Ma: 86 88 92
olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.951 0.5 (1.0)
*cmyn3** 0.0 0.049 0.5 (0.0)
*olvi4** 1.0 0.951 0.5 1.0
*cmyn4** 0.0 0.049 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 90.8 −2.3 48.29
*LAB*LABa* 90.8 −1.4 43.84
*LAB*TCHa* 75.0 43.86 91.85
relative* CIELAB *lab*
*lab*lab* 0.94 −0.015 0.5
*lab*tch* 0.75 0.5 0.255
*lab*nch* 0.0 0.5 0.255
***relative* Natural Colour (NC)**
*lab*lrj* 0.94 0.0 0.5
*lab*tce* 0.75 0.5 0.25
*lab*ncE* 0.0 0.5 j00g

***relative* Inform. Technology (IT)**
*olvi3** 1.0 0.901 0.0 (1.0)
*cmyn3** 0.0 0.099 1.0 (0.0)
*olvi4** 1.0 0.902 0.0 1.0
*cmyn4** 0.0 0.098 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 86.19 −3.62 91.81
*LAB*LABa* 86.19 −2.81 87.67
*LAB*TCHa* 50.0 87.72 91.84
relative* CIELAB *lab*
*lab*lab* 0.881 −0.031 0.999
*lab*tch* 0.5 1.0 0.255
*lab*nch* 0.0 1.0 0.255
***relative* Natural Colour (NC)**
*lab*lrj* 0.881 0.0 1.0
*lab*tce* 0.5 1.0 0.25
*lab*ncE* 0.0 1.0 j00g

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.451 0.0 (1.0)
*cmyn3** 0.5 0.549 1.0 (0.0)
*olvi4** 1.0 0.951 0.5 0.5
*cmyn4** 0.0 0.049 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 52.1 −1.55 45.67
*LAB*LABa* 52.1 −1.39 43.83
*LAB*TCHa* 25.01 43.86 91.84
relative* CIELAB *lab*
*lab*lab* 0.44 −0.015 0.5
*lab*tch* 0.25 0.5 0.255
*lab*nch* 0.5 0.5 0.255
***relative* Natural Colour (NC)**
*lab*lrj* 0.44 0.0 0.5
*lab*tce* 0.25 0.5 0.25
*lab*ncE* 0.5 0.5 r99j

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

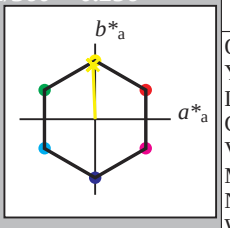
$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

Output: 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 t^*



%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.977 1.0 0.5 (1.0)
*cmyn3** 0.023 0.0 0.5 (0.0)
*olvi4** 0.977 1.0 0.5 1.0
*cmyn4** 0.023 0.0 0.5 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 −1.51 37.81
*LAB*LABa* 76.06 −1.51 37.81
*LAB*TCHa* 75.0 37.84 92.3
relative* CIELAB *lab*
*lab*lab* 0.75 −0.019 0.499
*lab*tch* 0.75 0.5 0.256
*lab*nch* 0.0 0.5 0.256
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 0.5
*lab*tce* 0.75 0.5 0.25
*lab*ncE* 0.0 0.5 r99j

***relative* Inform. Technology (IT)**
*olvi3** 0.954 1.0 0.0 (1.0)
*cmyn3** 0.046 0.0 1.0 (0.0)
*olvi4** 0.955 1.0 0.0 1.0
*cmyn4** 0.045 0.0 1.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −3.04 75.62
*LAB*LABa* 56.71 −3.04 75.62
*LAB*TCHa* 50.0 75.69 92.31
relative* CIELAB *lab*
*lab*lab* 0.5 −0.039 0.999
*lab*tch* 0.5 1.0 0.256
*lab*nch* 0.0 1.0 0.256
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 1.0
*lab*tce* 0.5 1.0 0.25
*lab*ncE* 0.0 1.0 r99j

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.477 0.5 0.0 (1.0)
*cmyn3** 0.523 0.5 1.0 (0.0)
*olvi4** 0.977 1.0 0.5 0.5
*cmyn4** 0.023 0.0 0.5 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 −1.52 37.81
*LAB*LABa* 37.36 −1.52 37.81
*LAB*TCHa* 25.01 37.84 92.31
relative* CIELAB *lab*
*lab*lab* 0.25 −0.019 0.499
*lab*tch* 0.25 0.5 0.256
*lab*nch* 0.5 0.5 0.256
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 0.5
*lab*tce* 0.25 0.5 0.25
*lab*ncE* 0.5 0.5 j00g

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

OE120−7, 3 step scales for constant CIELAB hue 92/360 = 0.255 (left)
3 step scales for constant CIELAB hue 92/360 = 0.256 (right)

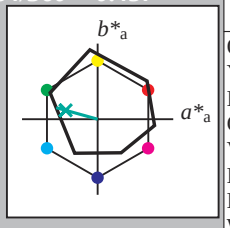
BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

Input: Colorimetric Offset Reflective System ORS18
for hue *h = lab*h = 164/360 = 0.457**
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 53 57 164
olv*Ma: 0.0 1.0 0.25

triangle lightness *t**



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.623 (1.0)
*cmyn3** 0.5 0.0 0.377 (0.0)
*olvi4** 0.5 1.0 0.623 1.0
*cmyn4** 0.5 0.0 0.377 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 74.1 −27.98 10.94
*LAB*LABa* 74.1 −27.4 7.62
*LAB*TCHa* 75.0 28.45 164.46
relative* CIELAB *lab*
*lab*lab* 0.725 −0.481 0.134
*lab*tch* 0.75 0.5 0.457
*lab*nch* 0.0 0.5 0.457
***relative* Natural Colour (NC)**
*lab*lrj* 0.725 −0.499 0.0
*lab*tce* 0.75 0.5 0.5
*lab*ncE* 0.0 0.5 g00b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 0.246 (1.0)
*cmyn3** 1.0 0.0 0.754 (0.0)
*olvi4** 0.0 1.0 0.246 1.0
*cmyn4** 1.0 0.0 0.754 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 52.8 −54.98 17.14
*LAB*LABa* 52.8 −54.81 15.26
*LAB*TCHa* 50.0 56.91 164.45
relative* CIELAB *lab*
*lab*lab* 0.45 −0.962 0.268
*lab*tch* 0.5 1.0 0.457
*lab*nch* 0.0 1.0 0.457
***relative* Natural Colour (NC)**
*lab*lrj* 0.45 −0.999 0.0
*lab*tce* 0.5 1.0 0.5
*lab*ncE* 0.0 1.0 j99g

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.123 (1.0)
*cmyn3** 1.0 0.5 0.877 (0.0)
*olvi4** 0.5 1.0 0.623 0.5
*cmyn4** 0.5 0.0 0.377 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 35.41 −27.24 8.34
*LAB*LABa* 35.41 −27.4 7.63
*LAB*TCHa* 25.01 28.46 164.44
relative* CIELAB *lab*
*lab*lab* 0.225 −0.481 0.134
*lab*tch* 0.25 0.5 0.457
*lab*nch* 0.5 0.5 0.457
***relative* Natural Colour (NC)**
*lab*lrj* 0.225 −0.499 0.0
*lab*tce* 0.25 0.5 0.5
*lab*ncE* 0.5 0.5 j99g

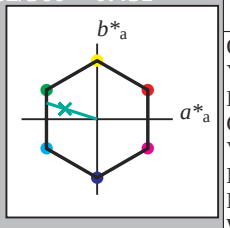
***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

Output: Colorimetric Standard Reflective System SRS18
for hue *h = lab*h = 162/360 = 0.451**
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 57 70 162
olv*Ma: 0.0 1.0 0.22

triangle lightness *t**



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 1.0 0.611 (1.0)
*cmyn3** 0.5 0.0 0.389 (0.0)
*olvi4** 0.5 1.0 0.611 1.0
*cmyn4** 0.5 0.0 0.389 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 −33.5 10.74
*LAB*LABa* 76.06 −33.5 10.74
*LAB*TCHa* 75.0 35.19 162.23
relative* CIELAB *lab*
*lab*lab* 0.75 −0.475 0.153
*lab*tch* 0.75 0.5 0.451
*lab*nch* 0.0 0.5 0.451
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 −0.499 0.0
*lab*tce* 0.75 0.5 0.5
*lab*ncE* 0.0 0.5 g00b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 1.0 0.222 (1.0)
*cmyn3** 1.0 0.0 0.778 (0.0)
*olvi4** 0.0 1.0 0.222 1.0
*cmyn4** 1.0 0.0 0.778 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −67.01 21.49
*LAB*LABa* 56.71 −67.01 21.49
*LAB*TCHa* 50.0 70.38 162.22
relative* CIELAB *lab*
*lab*lab* 0.5 −0.951 0.305
*lab*tch* 0.5 1.0 0.451
*lab*nch* 0.0 1.0 0.451
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 −0.999 0.0
*lab*tce* 0.5 1.0 0.5
*lab*ncE* 0.0 1.0 j99g

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.5 0.111 (1.0)
*cmyn3** 1.0 0.5 0.889 (0.0)
*olvi4** 0.5 1.0 0.611 0.5
*cmyn4** 0.5 0.0 0.389 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 −33.5 10.75
*LAB*LABa* 37.36 −33.5 10.75
*LAB*TCHa* 25.01 35.19 162.21
relative* CIELAB *lab*
*lab*lab* 0.25 −0.475 0.153
*lab*tch* 0.25 0.5 0.451
*lab*nch* 0.5 0.5 0.451
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 −0.499 0.0
*lab*tce* 0.25 0.5 0.5
*lab*ncE* 0.5 0.5 j99g

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

*n** = 0,00
blackness *n**
0,25 0,50 *n** = 0,50 0,75 1,00
chromaticness *c**
*n** = 1,0

OE120−7, 3 step scales for constant CIELAB hue 164/360 = 0.457 (left)
3 step scales for constant CIELAB hue 162/360 = 0.451 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

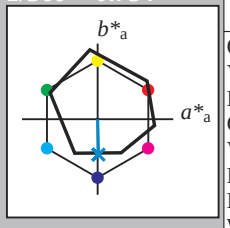
See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E08FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/OE12/ Form: 9/10, Serie: 1/1, Page: 9 Page: count: 9

Input: Colorimetric Offset Reflective System ORS18
for hue $h^* = lab^*h = 271/360 = 0.754$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 42 45 271
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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	58.66	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

%Gamut
u^*_{rel} = 93
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 −0.98 4.75
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 −0.24 2.14
*LAB*LABa* 56.71 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 0.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.02 0.5 −0.47
*LAB*LABa* 18.02 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.744 1.0 (1.0)
*cmyn3** 0.5 0.256 0.0 (0.0)
*olvi4** 0.5 0.744 1.0 1.0
*cmyn4** 0.5 0.256 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 68.6 0.07 −19.39
*LAB*LABa* 68.6 0.55 −22.34
*LAB*TCHa* 75.0 22.36 271.4
relative* CIELAB *lab*
*lab*lab* 0.654 0.012 −0.499
*lab*tch* 0.75 0.5 0.754
*lab*nch* 0.0 0.5 0.754
***relative* Natural Colour (NC)**
*lab*lrj* 0.654 0.0 −0.499
*lab*tce* 0.75 0.5 0.75
*lab*ncE* 0.0 0.5 g99b

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.244 0.5 (1.0)
*cmyn3** 1.0 0.756 0.5 (0.0)
*olvi4** 0.5 0.744 1.0 0.5
*cmyn4** 0.5 0.256 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 29.9 0.82 −22.01
*LAB*LABa* 29.9 0.55 −22.34
*LAB*TCHa* 25.01 22.36 271.42
relative* CIELAB *lab*
*lab*lab* 0.154 0.012 −0.499
*lab*tch* 0.25 0.5 0.754
*lab*nch* 0.5 0.5 0.754
***relative* Natural Colour (NC)**
*lab*lrj* 0.154 0.0 −0.499
*lab*tce* 0.25 0.5 0.75
*lab*ncE* 0.5 0.5 b00r

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.488 1.0 (1.0)
*cmyn3** 1.0 0.512 0.0 (0.0)
*olvi4** 0.0 0.488 1.0 1.0
*cmyn4** 1.0 0.512 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 41.79 1.14 −43.55
*LAB*LABa* 41.79 1.1 −44.69
*LAB*TCHa* 50.0 44.71 271.41
relative* CIELAB *lab*
*lab*lab* 0.307 0.025 −0.998
*lab*tch* 0.5 1.0 0.754
*lab*nch* 0.0 1.0 0.754
***relative* Natural Colour (NC)**
*lab*lrj* 0.307 0.0 −0.999
*lab*tce* 0.5 1.0 0.75
*lab*ncE* 0.0 1.0 b00r

$n^* = 0{,}00$

blackness n^*

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

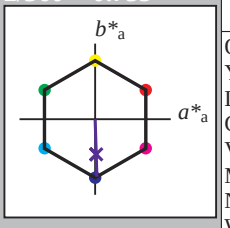
chromaticness c^*

$n^* = 1{,}0$

Output: Colorimetric Standard Reflective System SRS18
for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 57 76 272
olv*Ma: 0.03 0.0 1.0

triangle lightness t^*



SRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Gamut
u^*_{rel} = 100
%Regularity
$g^*_{H,rel}$ = 100
$g^*_{C,rel}$ = 100

***relative* Inform. Technology (IT)**
*olvi3** 1.0 1.0 1.0 (1.0)
*cmyn3** 0.0 0.0 0.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 95.41 0.0 0.0
*LAB*LABa* 95.41 0.0 0.0
*LAB*TCHa* 99.99 0.01 –
relative* CIELAB *lab*
*lab*lab* 1.0 0.0 0.0
*lab*tch* 1.0 0.0 –
*lab*nch* 0.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 1.0 0.0 0.0
*lab*tce* 1.0 0.0 –
*lab*ncE* 0.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.5 0.5 0.5 (1.0)
*cmyn3** 0.5 0.5 0.5 (0.0)
*olvi4** 1.0 1.0 1.0 0.5
*cmyn4** 0.0 0.0 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.72 0.0 0.0
*LAB*LABa* 56.72 0.0 0.0
*LAB*TCHa* 50.0 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.5 0.0 0.0
*lab*tch* 0.5 0.0 –
*lab*nch* 0.5 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 0.0
*lab*tce* 0.5 0.0 –
*lab*ncE* 0.5 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.0 0.0 0.0 (1.0)
*cmyn3** 1.0 1.0 1.0 (0.0)
*olvi4** 1.0 1.0 1.0 1.0
*cmyn4** 0.0 0.0 0.0 1.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 18.03 0.0 0.0
*LAB*LABa* 18.03 0.0 0.0
*LAB*TCHa* 0.01 0.01 –
relative* CIELAB *lab*
*lab*lab* 0.0 0.0 0.0
*lab*tch* 0.0 0.0 –
*lab*nch* 1.0 0.0 –
***relative* Natural Colour (NC)**
*lab*lrj* 0.0 0.0 0.0
*lab*tce* 0.0 0.0 –
*lab*ncE* 1.0 0.0 –

***relative* Inform. Technology (IT)**
*olvi3** 0.517 0.5 1.0 (1.0)
*cmyn3** 0.483 0.5 0.0 (0.0)
*olvi4** 0.517 0.5 1.0 1.0
*cmyn4** 0.483 0.5 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 76.06 1.15 −38.02
*LAB*LABa* 76.06 1.15 −38.02
*LAB*TCHa* 75.0 38.04 271.74
relative* CIELAB *lab*
*lab*lab* 0.75 0.015 −0.499
*lab*tch* 0.75 0.5 0.755
*lab*nch* 0.0 0.5 0.755
***relative* Natural Colour (NC)**
*lab*lrj* 0.75 0.0 −0.499
*lab*tce* 0.75 0.5 0.75
*lab*ncE* 0.0 0.5 b00r

***relative* Inform. Technology (IT)**
*olvi3** 0.017 0.0 0.5 (1.0)
*cmyn3** 0.983 1.0 0.5 (0.0)
*olvi4** 0.517 0.5 1.0 0.5
*cmyn4** 0.483 0.5 0.0 0.5
***standard* and *adapted* CIELAB**
*LAB*LAB* 37.36 1.15 −38.02
*LAB*LABa* 37.36 1.15 −38.02
*LAB*TCHa* 25.01 38.05 271.73
relative* CIELAB *lab*
*lab*lab* 0.25 0.015 −0.499
*lab*tch* 0.25 0.5 0.755
*lab*nch* 0.5 0.5 0.755
***relative* Natural Colour (NC)**
*lab*lrj* 0.25 0.0 −0.499
*lab*tce* 0.25 0.5 0.75
*lab*ncE* 0.5 0.5 g99b

***relative* Inform. Technology (IT)**
*olvi3** 0.034 0.0 1.0 (1.0)
*cmyn3** 0.966 1.0 0.0 (0.0)
*olvi4** 0.035 0.0 1.0 1.0
*cmyn4** 0.965 1.0 0.0 0.0
***standard* and *adapted* CIELAB**
*LAB*LAB* 56.71 2.3 −76.05
*LAB*LABa* 56.71 2.3 −76.05
*LAB*TCHa* 50.0 76.09 271.73
relative* CIELAB *lab*
*lab*lab* 0.5 0.03 −0.998
*lab*tch* 0.5 1.0 0.755
*lab*nch* 0.0 1.0 0.755
***relative* Natural Colour (NC)**
*lab*lrj* 0.5 0.0 −0.999
*lab*tce* 0.5 1.0 0.75
*lab*ncE* 0.0 1.0 g99b

$n^* = 0{,}00$

blackness n^*

0,25 0,50 $n^* = 0{,}50$ 0,75 1,00

chromaticness c^*

$n^* = 1{,}0$

OE120−7, 3 step scales for constant CIELAB hue 271/360 = 0.754 (left)

3 step scales for constant CIELAB hue 272/360 = 0.755 (right)

BAM-test chart OE12; Colorimetric systems ORS18 & SRS18
D65: 2 coordinate data of 3 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *cmy0* / 000n* setcmykcolor*

See for similar files: http://www.ps.bam.de/OE12/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0, CIELAB

BAM registration: 20060101-OE12/10Q/Q12E09FP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

/OE12/ Form: 10/10,Serie: 1/1, Page: 10 Page: count: 10