See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

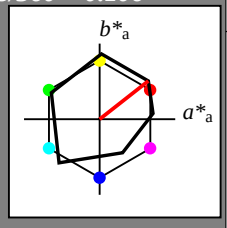
BAM registration: 20060101-RE10/10L/L10E00SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 1/10, Serie: 1/1, Page: 1 Page: count: 1

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.106$
*lab*tch* and *lab*nch*

A: hue O
LCH*Ma: 48 82 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
$u^*_{rel} = 96$
%Regularity
$g^*_{H,rel} = -385$
$g^*_{C,rel} = 62$

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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*	71.77	32.86	28.36
*LAB*LABa*	71.77	32.2	25.28
*LAB*TCHa*	75.0	40.94	38.14

relative* CIELAB *lab*

*lab*lab*	0.692	0.393	0.309
*lab*tch*	0.75	0.5	0.106
*lab*nch*	0.0	0.5	0.106

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

*lab*lrj*	0.692	0.496	0.064
*lab*tce*	0.75	0.5	0.02
*lab*ncE*	0.0	0.5	r08j

***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*	33.03	33.24	25.79
*LAB*LABa*	33.03	32.2	25.28
*LAB*TCHa*	25.01	40.94	38.14

relative* CIELAB *lab*

*lab*lab*	0.193	0.393	0.309
*lab*tch*	0.25	0.5	0.106
*lab*nch*	0.5	0.5	0.106

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

*lab*lrj*	0.193	0.496	0.064
*lab*tce*	0.25	0.5	0.02
*lab*ncE*	0.5	0.5	r08j

***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	64.41	50.57
*LAB*TCHa*	50.0	81.89	38.14

relative* CIELAB *lab*

*lab*lab*	0.385	0.786	0.617
*lab*tch*	0.5	1.0	0.106
*lab*nch*	0.0	1.0	0.106

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

*lab*lrj*	0.385	0.992	0.128
*lab*tce*	0.5	1.0	0.02
*lab*ncE*	0.0	1.0	r08j

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

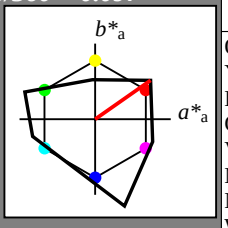
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.097$
*lab*tch* and *lab*nch*

A: hue O
LCH*Ma: 66 90 35
olv*Ma: 1.0 0.0 0.0

triangle lightness *t**



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
$u^*_{rel} = 141$
%Regularity
$g^*_{H,rel} = 39$
$g^*_{C,rel} = 43$

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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*	80.48	36.66	25.69
*LAB*LABa*	80.48	36.66	25.69
*LAB*TCHa*	75.0	44.77	35.02

relative* CIELAB *lab*

*lab*lab*	0.843	0.409	0.287
*lab*tch*	0.75	0.5	0.097
*lab*nch*	0.0	0.5	0.097

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

*lab*lrj*	0.843	0.5	0.007
*lab*tce*	0.75	0.5	0.002
*lab*ncE*	0.0	0.5	r00j

***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*	32.79	36.66	25.69
*LAB*LABa*	32.79	36.66	25.69
*LAB*TCHa*	25.01	44.77	35.02

relative* CIELAB *lab*

*lab*lab*	0.344	0.409	0.287
*lab*tch*	0.25	0.5	0.097
*lab*nch*	0.5	0.5	0.097

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

*lab*lrj*	0.344	0.5	0.007
*lab*tce*	0.25	0.5	0.002
*lab*ncE*	0.5	0.5	r00j

***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*	65.56	73.33	51.38
*LAB*LABa*	65.56	73.33	51.38
*LAB*TCHa*	50.0	89.53	35.02

relative* CIELAB *lab*

*lab*lab*	0.687	0.819	0.574
*lab*tch*	0.5	1.0	0.097
*lab*nch*	0.0	1.0	0.097

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

*lab*lrj*	0.687	1.0	0.014
*lab*tce*	0.5	1.0	0.002
*lab*ncE*	0.0	1.0	r00j

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

$n^* = 1{,}0$

RE100−7, 3 step scales for constant CIELAB hue 38/360 = 0.106 (left)

3 step scales for constant CIELAB hue 35/360 = 0.097 (right)

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

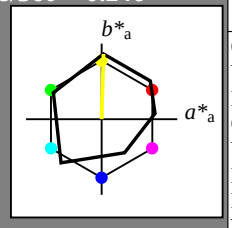
BAM registration: 20060101-RE10/10L/L10E01SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 2/10, Serie: 1/1, Page: 2 Page: count: 2

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 88/360 = 0.246$ *lab*tch* and *lab*nch*

A: hue Y
LCH*Ma: 93 86 88
olv*Ma: 1.0 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	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*	94.1	1.65	47.73
*LAB*LABa*	94.1	1.21	43.17
*LAB*TCHa*	75.0	43.19	88.4

relative* CIELAB *lab*

*lab*lab*	0.981	0.014	0.5
*lab*tch*	0.75	0.5	0.246
*lab*nch*	0.0	0.5	0.246

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

*lab*lrj*	0.981	−0.033	0.499
*lab*tce*	0.75	0.5	0.261
*lab*ncE*	0.0	0.5	j04g

***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*	55.37	2.02	45.16
*LAB*LABa*	55.37	1.21	43.17
*LAB*TCHa*	25.01	43.19	88.4

relative* CIELAB *lab*

*lab*lab*	0.481	0.014	0.5
*lab*tch*	0.25	0.5	0.246
*lab*nch*	0.5	0.5	0.246

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

*lab*lrj*	0.481	−0.033	0.499
*lab*tce*	0.25	0.5	0.261
*lab*ncE*	0.5	0.5	j04g

***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	0.0	0.0

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

*LAB*LAB*	92.61	2.87	90.8
*LAB*LABa*	92.61	2.41	86.34
*LAB*TCHa*	50.0	86.37	88.4

relative* CIELAB *lab*

*lab*lab*	0.961	0.028	0.999
*lab*tch*	0.5	1.0	0.246
*lab*nch*	0.0	1.0	0.246

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

*lab*lrj*	0.961	−0.067	0.997
*lab*tce*	0.5	1.0	0.261
*lab*ncE*	0.0	1.0	j04g

*n** = 0,00

blackness *n**

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

chromaticness *c**

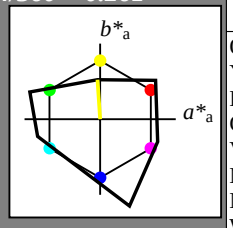
*n** = 1,0

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 94/360 = 0.261$ *lab*tch* and *lab*nch*

A: hue Y
LCH*Ma: 95 52 94
olv*Ma: 1.0 1.0 0.0

triangle lightness *t**



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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	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*	95.09	−1.74	26.11
*LAB*LABa*	95.09	−1.74	26.11
*LAB*TCHa*	75.0	26.17	93.83

relative* CIELAB *lab*

*lab*lab*	0.997	−0.032	0.499
*lab*tch*	0.75	0.5	0.261
*lab*nch*	0.0	0.5	0.261

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

*lab*lrj*	0.997	−0.083	0.493
*lab*tce*	0.75	0.5	0.277
*lab*ncE*	0.0	0.5	j10g

***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*	47.4	−1.74	26.11
*LAB*LABa*	47.4	−1.74	26.11
*LAB*TCHa*	25.01	26.17	93.83

relative* CIELAB *lab*

*lab*lab*	0.497	−0.032	0.499
*lab*tch*	0.25	0.5	0.261
*lab*nch*	0.5	0.5	0.261

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

*lab*lrj*	0.497	−0.083	0.493
*lab*tce*	0.25	0.5	0.277
*lab*ncE*	0.5	0.5	j10g

***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	0.0	0.0

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

*LAB*LAB*	94.77	−3.49	52.23
*LAB*LABa*	94.77	−3.49	52.23
*LAB*TCHa*	50.0	52.35	93.83

relative* CIELAB *lab*

*lab*lab*	0.993	−0.066	0.998
*lab*tch*	0.5	1.0	0.261
*lab*nch*	0.0	1.0	0.261

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

*lab*lrj*	0.993	−0.167	0.986
*lab*tce*	0.5	1.0	0.277
*lab*ncE*	0.0	1.0	j10g

*n** = 0,00

blackness *n**

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

chromaticness *c**

*n** = 1,0

RE100−7, 3 step scales for constant CIELAB hue 88/360 = 0.246 (left)

3 step scales for constant CIELAB hue 94/360 = 0.261 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

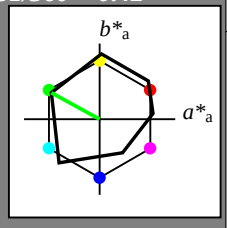
BAM registration: 20060101-RE10/10L/L10E02SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 3/10, Serie: 1/1, Page: 3 Page: count: 3

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.42$
*lab*tch* and *lab*nch*

A: hue L
LCH*Ma: 51 73 151
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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	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*	73.25	−31.25	20.68
*LAB*LABa*	73.25	−31.9	17.51
*LAB*TCHa*	75.0	36.4	151.25

relative* CIELAB *lab*

*lab*lab*	0.712	−0.437	0.24
*lab*tch*	0.75	0.5	0.42
*lab*nch*	0.0	0.5	0.42

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

*lab*lrj*	0.712	−0.455	0.204
*lab*tce*	0.75	0.5	0.433
*lab*ncE*	0.0	0.5	j73g

***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*	34.51	−30.88	18.11
*LAB*LABa*	34.51	−31.9	17.51
*LAB*TCHa*	25.01	36.4	151.25

relative* CIELAB *lab*

*lab*lab*	0.212	−0.437	0.24
*lab*tch*	0.25	0.5	0.42
*lab*nch*	0.5	0.5	0.42

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

*lab*lrj*	0.212	−0.455	0.204
*lab*tce*	0.25	0.5	0.433
*lab*ncE*	0.5	0.5	j73g

***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	−63.81	35.01
*LAB*TCHa*	50.0	72.79	151.25

relative* CIELAB *lab*

*lab*lab*	0.423	−0.876	0.481
*lab*tch*	0.5	1.0	0.42
*lab*nch*	0.0	1.0	0.42

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

*lab*lrj*	0.423	−0.912	0.408
*lab*tce*	0.5	1.0	0.433
*lab*ncE*	0.0	1.0	j73g

*n** = 0,00

blackness *n**

*n** = 1,0

*n** = 0,50

0,25 0,50 0,75 1,00

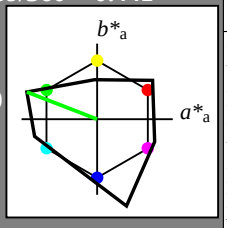
chromaticness *c**

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 159/360 = 0.441$
*lab*tch* and *lab*nch*

A: hue L
LCH*Ma: 77 100 159
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	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*	86.44	−46.47	18.0
*LAB*LABa*	86.44	−46.47	18.0
*LAB*TCHa*	75.0	49.84	158.83

relative* CIELAB *lab*

*lab*lab*	0.906	−0.465	0.18
*lab*tch*	0.75	0.5	0.441
*lab*nch*	0.0	0.5	0.441

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

*lab*lrj*	0.906	−0.483	0.125
*lab*tce*	0.75	0.5	0.46
*lab*ncE*	0.0	0.5	j83g

***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*	38.75	−46.47	18.0
*LAB*LABa*	38.75	−46.47	18.0
*LAB*TCHa*	25.01	49.84	158.83

relative* CIELAB *lab*

*lab*lab*	0.406	−0.465	0.18
*lab*tch*	0.25	0.5	0.441
*lab*nch*	0.5	0.5	0.441

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

*lab*lrj*	0.406	−0.483	0.125
*lab*tce*	0.25	0.5	0.46
*lab*ncE*	0.5	0.5	j83g

***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*	77.47	−92.95	35.99
*LAB*LABa*	77.47	−92.95	35.99
*LAB*TCHa*	50.0	99.69	158.83

relative* CIELAB *lab*

*lab*lab*	0.812	−0.931	0.361
*lab*tch*	0.5	1.0	0.441
*lab*nch*	0.0	1.0	0.441

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

*lab*lrj*	0.812	−0.967	0.25
*lab*tce*	0.5	1.0	0.46
*lab*ncE*	0.0	1.0	j83g

*n** = 0,00

blackness *n**

*n** = 1,0

*n** = 0,50

0,25 0,50 0,75 1,00

chromaticness *c**

RE100−7, 3 step scales for constant CIELAB hue 151/360 = 0.42 (left)

3 step scales for constant CIELAB hue 159/360 = 0.441 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

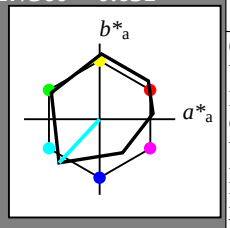
BAM registration: 20060101-RE10/10L/L10E03SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 4/10, Serie: 1/1, Page: 4 Page: count: 4

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 227/360 = 0.631$
*lab*tch* and *lab*nch*

A: hue C
LCH*Ma: 51 79 227
olv*Ma: 0.0 1.0 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
$u^*_{rel} = 96$
%Regularity
$g^*_{H,rel} = -385$
$g^*_{C,rel} = 62$

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	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*	73.42	−26.18	−25.65
*LAB*LABa*	73.42	−26.83	−28.84
*LAB*TCHa*	75.0	39.4	227.06

relative* CIELAB *lab*

*lab*lab*	0.714	−0.34	−0.365
*lab*tch*	0.75	0.5	0.631
*lab*nch*	0.0	0.5	0.631

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

*lab*lrj*	0.714	−0.244	−0.435
*lab*tce*	0.75	0.5	0.668
*lab*ncE*	0.0	0.5	g67b

***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*	34.68	−25.81	−28.22
*LAB*LABa*	34.68	−26.83	−28.84
*LAB*TCHa*	25.01	39.4	227.06

relative* CIELAB *lab*

*lab*lab*	0.214	−0.34	−0.365
*lab*tch*	0.25	0.5	0.631
*lab*nch*	0.5	0.5	0.631

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

*lab*lrj*	0.214	−0.244	−0.435
*lab*tce*	0.25	0.5	0.668
*lab*ncE*	0.5	0.5	g67b

***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*	51.25	−52.81	−55.97
*LAB*LABa*	51.25	−53.67	−57.68
*LAB*TCHa*	50.0	78.8	227.06

relative* CIELAB *lab*

*lab*lab*	0.428	−0.68	−0.731
*lab*tch*	0.5	1.0	0.631
*lab*nch*	0.0	1.0	0.631

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

*lab*lrj*	0.428	−0.489	−0.871
*lab*tce*	0.5	1.0	0.668
*lab*ncE*	0.0	1.0	g67b

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

$n^* = 1{,}0$

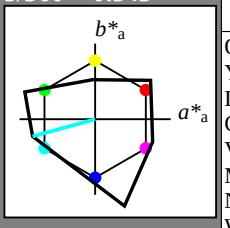
RE100−7, 3 step scales for constant CIELAB hue 227/360 = 0.631 (left)

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 195/360 = 0.543$
*lab*tch* and *lab*nch*

A: hue C
LCH*Ma: 78 86 195
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
$u^*_{rel} = 141$
%Regularity
$g^*_{H,rel} = 39$
$g^*_{C,rel} = 43$

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	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*	86.88	−41.33	−11.36
*LAB*LABa*	86.88	−41.33	−11.36
*LAB*TCHa*	75.0	42.88	195.38

relative* CIELAB *lab*

*lab*lab*	0.911	−0.481	−0.132
*lab*tch*	0.75	0.5	0.543
*lab*nch*	0.0	0.5	0.543

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

*lab*lrj*	0.911	−0.452	−0.211
*lab*tce*	0.75	0.5	0.57
*lab*ncE*	0.0	0.5	g27b

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

*olvi3**	0.5	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*	39.19	−41.33	−11.36
*LAB*LABa*	39.19	−41.33	−11.36
*LAB*TCHa*	25.01	42.88	195.38

relative* CIELAB *lab*

*lab*lab*	0.411	−0.481	−0.132
*lab*tch*	0.25	0.5	0.543
*lab*nch*	0.5	0.5	0.543

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

*lab*lrj*	0.411	−0.452	−0.211
*lab*tce*	0.25	0.5	0.57
*lab*ncE*	0.5	0.5	g27b

***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*	78.35	−82.67	−22.74
*LAB*LABa*	78.35	−82.67	−22.74
*LAB*TCHa*	50.0	85.75	195.38

relative* CIELAB *lab*

*lab*lab*	0.821	−0.963	−0.264
*lab*tch*	0.5	1.0	0.543
*lab*nch*	0.0	1.0	0.543

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

*lab*lrj*	0.821	−0.904	−0.423
*lab*tce*	0.5	1.0	0.57
*lab*ncE*	0.0	1.0	g27b

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

$n^* = 1{,}0$

3 step scales for constant CIELAB hue 195/360 = 0.543 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

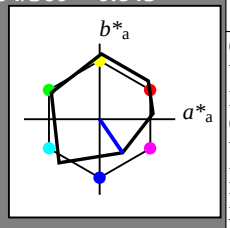
BAM registration: 20060101-RE10/10L/L10E04SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 5/10. Serie: 1/1, Page: 5 Page: count: 5

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 304/360 = 0.845$
*lab*tch* and *lab*nch*

A: hue V
LCH*Ma: 26 54 304
olv*Ma: 0.0 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
$u^*_{rel} = 96$
%Regularity
$g^*_{H,rel} = -385$
$g^*_{C,rel} = 62$

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	0.5	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*	60.66	15.94	−19.84
*LAB*LABa*	60.66	15.17	−22.17
*LAB*TCHa*	75.0	26.87	304.36

relative* CIELAB *lab*

*lab*lab*	0.549	0.282	−0.412
*lab*tch*	0.75	0.5	0.845
*lab*nch*	0.0	0.5	0.845

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

*lab*lrj*	0.549	0.274	−0.417
*lab*tce*	0.75	0.5	0.842
*lab*ncE*	0.0	0.5	b36r

***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*	21.92	16.31	−22.41
*LAB*LABa*	21.92	15.17	−22.17
*LAB*TCHa*	25.01	26.87	304.36

relative* CIELAB *lab*

*lab*lab*	0.049	0.282	−0.412
*lab*tch*	0.25	0.5	0.845
*lab*nch*	0.5	0.5	0.845

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

*lab*lrj*	0.049	0.274	−0.417
*lab*tce*	0.25	0.5	0.842
*lab*ncE*	0.5	0.5	b36r

***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	30.34	−44.36
*LAB*TCHa*	50.0	53.75	304.36

relative* CIELAB *lab*

*lab*lab*	0.098	0.564	−0.824
*lab*tch*	0.5	1.0	0.845
*lab*nch*	0.0	1.0	0.845

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

*lab*lrj*	0.098	0.548	−0.835
*lab*tce*	0.5	1.0	0.842
*lab*ncE*	0.0	1.0	b36r

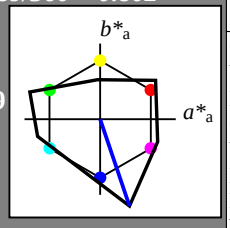
$n^* = 0{,}00$
blackness n^*
0,25 0,50 $n^* = 0{,}50$ 0,75 1,00
chromaticness c^*
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 289/360 = 0.802$
*lab*tch* and *lab*nch*

A: hue V
LCH*Ma: 13 121 289
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
$u^*_{rel} = 141$
%Regularity
$g^*_{H,rel} = 39$
$g^*_{C,rel} = 43$

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	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*	53.98	19.4	−57.39
*LAB*LABa*	53.98	19.4	−57.39
*LAB*TCHa*	75.0	60.59	288.68

relative* CIELAB *lab*

*lab*lab*	0.566	0.16	−0.473
*lab*tch*	0.75	0.5	0.802
*lab*nch*	0.0	0.5	0.802

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

*lab*lrj*	0.566	0.193	−0.46
*lab*tce*	0.75	0.5	0.813
*lab*ncE*	0.0	0.5	b25r

***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*	6.29	19.4	−57.39
*LAB*LABa*	6.29	19.4	−57.39
*LAB*TCHa*	25.01	60.59	288.68

relative* CIELAB *lab*

*lab*lab*	0.066	0.16	−0.473
*lab*tch*	0.25	0.5	0.802
*lab*nch*	0.5	0.5	0.802

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

*lab*lrj*	0.066	0.193	−0.46
*lab*tce*	0.25	0.5	0.813
*lab*ncE*	0.5	0.5	b25r

***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*	12.56	38.8	−114.79
*LAB*LABa*	12.56	38.8	−114.79
*LAB*TCHa*	50.0	121.18	288.68

relative* CIELAB *lab*

*lab*lab*	0.132	0.32	−0.946
*lab*tch*	0.5	1.0	0.802
*lab*nch*	0.0	1.0	0.802

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

*lab*lrj*	0.132	0.386	−0.921
*lab*tce*	0.5	1.0	0.813
*lab*ncE*	0.0	1.0	b25r

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

RE100−7, 3 step scales for constant CIELAB hue 304/360 = 0.845 (left)
3 step scales for constant CIELAB hue 289/360 = 0.802 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues
input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

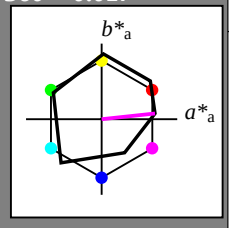
BAM registration: 20060101-RE10/10L/L10E05SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 6/10. Serie: 1/1, Page: 6 Page: count: 6

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 6/360 = 0.017$
*lab*tch* and *lab*nch*

A: hue M
LCH*Ma: 56 71 6
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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	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*	75.92	35.91	7.13
*LAB*LABa*	75.92	35.29	3.78
*LAB*TCHa*	75.0	35.49	6.12

relative* CIELAB *lab*

*lab*lab*	0.746	0.497	0.053
*lab*tch*	0.75	0.5	0.017
*lab*nch*	0.0	0.5	0.017

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

*lab*lrj*	0.746	0.476	−0.151
*lab*tce*	0.75	0.5	0.951
*lab*ncE*	0.0	0.5	b80r

***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*	37.18	36.28	4.56
*LAB*LABa*	37.18	35.29	3.78
*LAB*TCHa*	25.01	35.49	6.12

relative* CIELAB *lab*

*lab*lab*	0.246	0.497	0.053
*lab*tch*	0.25	0.5	0.017
*lab*nch*	0.5	0.5	0.017

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

*lab*lrj*	0.246	0.476	−0.151
*lab*tce*	0.25	0.5	0.951
*lab*ncE*	0.5	0.5	b80r

***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*	56.25	71.39	9.61
*LAB*LABa*	56.25	70.58	7.56
*LAB*TCHa*	50.0	70.98	6.12

relative* CIELAB *lab*

*lab*lab*	0.492	0.994	0.107
*lab*tch*	0.5	1.0	0.017
*lab*nch*	0.0	1.0	0.017

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

*lab*lrj*	0.492	0.953	−0.303
*lab*tce*	0.5	1.0	0.951
*lab*ncE*	0.0	1.0	b80r

$n^* = 0{,}00$

blackness *n**

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

chromaticness *c**

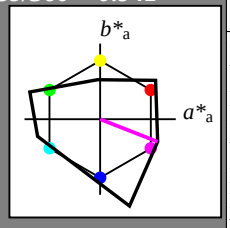
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 339/360 = 0.941$
*lab*tch* and *lab*nch*

A: hue M
LCH*Ma: 67 82 339
olv*Ma: 1.0 0.0 1.0

triangle lightness *t**



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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	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*	81.05	38.03	−14.89
*LAB*LABa*	81.05	38.03	−14.89
*LAB*TCHa*	75.0	40.85	338.6

relative* CIELAB *lab*

*lab*lab*	0.85	0.465	−0.181
*lab*tch*	0.75	0.5	0.941
*lab*nch*	0.0	0.5	0.941

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

*lab*lrj*	0.85	0.407	−0.29
*lab*tce*	0.75	0.5	0.901
*lab*ncE*	0.0	0.5	b60r

***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*	33.36	38.03	−14.89
*LAB*LABa*	33.36	38.03	−14.89
*LAB*TCHa*	25.01	40.85	338.6

relative* CIELAB *lab*

*lab*lab*	0.35	0.465	−0.181
*lab*tch*	0.25	0.5	0.941
*lab*nch*	0.5	0.5	0.941

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

*lab*lrj*	0.35	0.407	−0.29
*lab*tce*	0.25	0.5	0.901
*lab*ncE*	0.5	0.5	b60r

***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*	66.71	76.06	−29.79
*LAB*LABa*	66.71	76.06	−29.79
*LAB*TCHa*	50.0	81.7	338.6

relative* CIELAB *lab*

*lab*lab*	0.699	0.931	−0.364
*lab*tch*	0.5	1.0	0.941
*lab*nch*	0.0	1.0	0.941

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

*lab*lrj*	0.699	0.813	−0.581
*lab*tce*	0.5	1.0	0.901
*lab*ncE*	0.0	1.0	b60r

$n^* = 0{,}00$

blackness *n**

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

chromaticness *c**

$n^* = 1{,}0$

RE100−7, 3 step scales for constant CIELAB hue 6/360 = 0.017 (left)

3 step scales for constant CIELAB hue 339/360 = 0.941 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

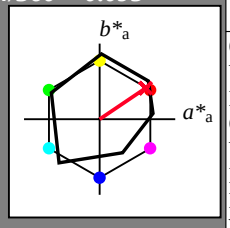
BAM registration: 20060101-RE10/10L/L10E06SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 7/10, Serie: 1/1, Page: 7 Page: count: 7

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 34/360 = 0.095$
*lab*tch* and *lab*nch*

A: hue R
LCH*Ma: 49 79 34
olv*Ma: 1.0 0.0 0.15

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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	0.575	(1.0)
*cmyn3**	0.0	0.5	0.425	(0.0)
*olvi4**	1.0	0.5	0.575	1.0
*cmyn4**	0.0	0.5	0.425	0.0

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

*LAB*LAB*	72.39	33.32	25.17
*LAB*LABa*	72.39	32.67	22.05
*LAB*TCHa*	75.0	39.41	34.02

relative* CIELAB *lab*

*lab*lab*	0.7	0.414	0.28
*lab*tch*	0.75	0.5	0.095
*lab*nch*	0.0	0.5	0.095

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

*lab*lrj*	0.7	0.5	0.0
*lab*tce*	0.75	0.5	1.0
*lab*ncE*	0.0	0.5	b99r

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

*olvi3**	0.5	0.0	0.075	(1.0)
*cmyn3**	0.5	1.0	0.925	(0.0)
*olvi4**	1.0	0.5	0.575	0.5
*cmyn4**	0.0	0.5	0.425	0.5

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

*LAB*LAB*	33.65	33.7	22.6
*LAB*LABa*	33.65	32.67	22.06
*LAB*TCHa*	25.01	39.42	34.03

relative* CIELAB *lab*

*lab*lab*	0.201	0.414	0.28
*lab*tch*	0.25	0.5	0.095
*lab*nch*	0.5	0.5	0.095

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

*lab*lrj*	0.201	0.5	0.0
*lab*tce*	0.25	0.5	0.0
*lab*ncE*	0.5	0.5	r00j

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

*olvi3**	1.0	0.0	0.15	(1.0)
*cmyn3**	0.0	1.0	0.85	(0.0)
*olvi4**	1.0	0.0	0.15	1.0
*cmyn4**	0.0	1.0	0.85	0.0

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

*LAB*LAB*	49.19	66.21	45.68
*LAB*LABa*	49.19	65.33	44.11
*LAB*TCHa*	50.0	78.83	34.02

relative* CIELAB *lab*

*lab*lab*	0.401	0.829	0.559
*lab*tch*	0.5	1.0	0.095
*lab*nch*	0.0	1.0	0.095

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

*lab*lrj*	0.401	1.0	0.0
*lab*tce*	0.5	1.0	0.0
*lab*ncE*	0.0	1.0	r00j

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

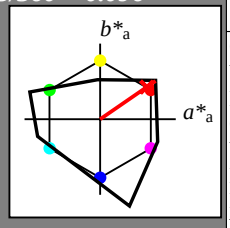
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 35/360 = 0.096$
*lab*tch* and *lab*nch*

A: hue R
LCH*Ma: 66 89 35
olv*Ma: 1.0 0.0 0.01

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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	0.505	(1.0)
*cmyn3**	0.0	0.5	0.495	(0.0)
*olvi4**	1.0	0.5	0.505	1.0
*cmyn4**	0.0	0.5	0.495	0.0

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

*LAB*LAB*	80.48	36.68	25.28
*LAB*LABa*	80.48	36.68	25.28
*LAB*TCHa*	75.0	44.55	34.58

relative* CIELAB *lab*

*lab*lab*	0.844	0.412	0.284
*lab*tch*	0.75	0.5	0.096
*lab*nch*	0.0	0.5	0.096

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

*lab*lrj*	0.844	0.5	0.0
*lab*tce*	0.75	0.5	1.0
*lab*ncE*	0.0	0.5	b99r

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

*olvi3**	0.5	0.0	0.005	(1.0)
*cmyn3**	0.5	1.0	0.995	(0.0)
*olvi4**	1.0	0.5	0.505	0.5
*cmyn4**	0.0	0.5	0.495	0.5

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

*LAB*LAB*	32.79	36.68	25.29
*LAB*LABa*	32.79	36.68	25.29
*LAB*TCHa*	25.01	44.55	34.59

relative* CIELAB *lab*

*lab*lab*	0.344	0.412	0.284
*lab*tch*	0.25	0.5	0.096
*lab*nch*	0.5	0.5	0.096

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

*lab*lrj*	0.344	0.5	0.0
*lab*tce*	0.25	0.5	0.0
*lab*ncE*	0.5	0.5	r00j

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

*olvi3**	1.0	0.0	0.01	(1.0)
*cmyn3**	0.0	1.0	0.99	(0.0)
*olvi4**	1.0	0.0	0.01	1.0
*cmyn4**	0.0	1.0	0.99	0.0

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

*LAB*LAB*	65.57	73.35	50.57
*LAB*LABa*	65.57	73.35	50.57
*LAB*TCHa*	50.0	89.1	34.58

relative* CIELAB *lab*

*lab*lab*	0.687	0.823	0.568
*lab*tch*	0.5	1.0	0.096
*lab*nch*	0.0	1.0	0.096

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

*lab*lrj*	0.687	1.0	0.0
*lab*tce*	0.5	1.0	0.0
*lab*ncE*	0.0	1.0	r00j

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

$n^* = 1{,}0$

RE100−7, 3 step scales for constant CIELAB hue 34/360 = 0.095 (left)

3 step scales for constant CIELAB hue 35/360 = 0.096 (right)

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

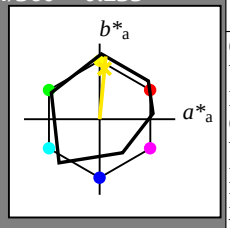
BAM registration: 20060101-RE10/10L/L10E07SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 8/10, Serie: 1/1, Page: 8 Page: count: 8

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 84/360 = 0.235$
*lab*tch* and *lab*nch*

A: hue J
LCH*Ma: 89 83 84
olv*Ma: 1.0 0.91 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	0.954	0.5	(1.0)
*cmyn3**	0.0	0.046	0.5	(0.0)
*olvi4**	1.0	0.954	0.5	1.0
*cmyn4**	0.0	0.046	0.5	0.0

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

*LAB*LAB*	92.06	4.5	45.96
*LAB*LABa*	92.06	4.04	41.54
*LAB*TCHa*	75.0	41.73	84.45

relative* CIELAB *lab*

*lab*lab*	0.954	0.048	0.498
*lab*tch*	0.75	0.5	0.235
*lab*nch*	0.0	0.5	0.235

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

*lab*lrj*	0.954	0.0	0.5
*lab*tce*	0.75	0.5	0.25
*lab*ncE*	0.0	0.5	j00g

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

*olvi3**	0.5	0.454	0.0	(1.0)
*cmyn3**	0.5	0.546	1.0	(0.0)
*olvi4**	1.0	0.954	0.5	0.5
*cmyn4**	0.0	0.046	0.5	0.5

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

*LAB*LAB*	53.32	4.88	43.38
*LAB*LABa*	53.32	4.05	41.53
*LAB*TCHa*	25.01	41.73	84.44

relative* CIELAB *lab*

*lab*lab*	0.454	0.048	0.498
*lab*tch*	0.25	0.5	0.235
*lab*nch*	0.5	0.5	0.235

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

*lab*lrj*	0.454	0.0	0.5
*lab*tce*	0.25	0.5	0.25
*lab*ncE*	0.5	0.5	r99j

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

*olvi3**	1.0	0.908	0.0	(1.0)
*cmyn3**	0.0	0.092	1.0	(0.0)
*olvi4**	1.0	0.908	0.0	1.0
*cmyn4**	0.0	0.092	1.0	0.0

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

*LAB*LAB*	88.52	8.58	87.26
*LAB*LABa*	88.52	8.08	83.07
*LAB*TCHa*	50.0	83.46	84.44

relative* CIELAB *lab*

*lab*lab*	0.909	0.097	0.995
*lab*tch*	0.5	1.0	0.235
*lab*nch*	0.0	1.0	0.235

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

*lab*lrj*	0.909	0.0	1.0
*lab*tce*	0.5	1.0	0.25
*lab*ncE*	0.0	1.0	j00g

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

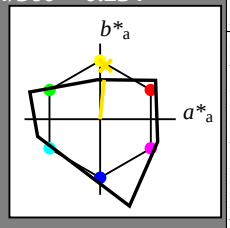
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 84/360 = 0.234$
*lab*tch* and *lab*nch*

A: hue J
LCH*Ma: 91 52 84
olv*Ma: 1.0 0.89 0.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	0.943	0.5	(1.0)
*cmyn3**	0.0	0.057	0.5	(0.0)
*olvi4**	1.0	0.943	0.5	1.0
*cmyn4**	0.0	0.057	0.5	0.0

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

*LAB*LAB*	93.43	2.59	26.07
*LAB*LABa*	93.43	2.59	26.07
*LAB*TCHa*	75.0	26.2	84.32

relative* CIELAB *lab*

*lab*lab*	0.979	0.049	0.497
*lab*tch*	0.75	0.5	0.234
*lab*nch*	0.0	0.5	0.234

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

*lab*lrj*	0.979	0.0	0.5
*lab*tce*	0.75	0.5	0.25
*lab*ncE*	0.0	0.5	j00g

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

*olvi3**	0.5	0.443	0.0	(1.0)
*cmyn3**	0.5	0.557	1.0	(0.0)
*olvi4**	1.0	0.943	0.5	0.5
*cmyn4**	0.0	0.057	0.5	0.5

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

*LAB*LAB*	45.74	2.6	26.07
*LAB*LABa*	45.74	2.6	26.07
*LAB*TCHa*	25.01	26.2	84.3

relative* CIELAB *lab*

*lab*lab*	0.479	0.05	0.497
*lab*tch*	0.25	0.5	0.234
*lab*nch*	0.5	0.5	0.234

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

*lab*lrj*	0.479	0.0	0.5
*lab*tce*	0.25	0.5	0.25
*lab*ncE*	0.5	0.5	r99j

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

*olvi3**	1.0	0.887	0.0	(1.0)
*cmyn3**	0.0	0.113	1.0	(0.0)
*olvi4**	1.0	0.887	0.0	1.0
*cmyn4**	0.0	0.113	1.0	0.0

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

*LAB*LAB*	91.46	5.19	52.13
*LAB*LABa*	91.46	5.19	52.13
*LAB*TCHa*	50.0	52.39	84.31

relative* CIELAB *lab*

*lab*lab*	0.959	0.099	0.995
*lab*tch*	0.5	1.0	0.234
*lab*nch*	0.0	1.0	0.234

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

*lab*lrj*	0.959	0.0	1.0
*lab*tce*	0.5	1.0	0.25
*lab*ncE*	0.0	1.0	j00g

$n^* = 0{,}00$

blackness n^*

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

chromaticness c^*

$n^* = 1{,}0$

RE100−7, 3 step scales for constant CIELAB hue 84/360 = 0.235 (left)

3 step scales for constant CIELAB hue 84/360 = 0.234 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

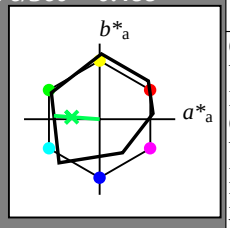
BAM registration: 20060101-RE10/10L/L10E08SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 9/10, Serie: 1/1, Page: 9 Page: count: 9

Input: Colorimetric Offset Reflective System ORS18

for hue *h** = *lab*h* = 176/360 = 0.488
*lab*tch* and *lab*nch*

A: hue G
LCH*Ma: 51 61 176
olv*Ma: 0.0 1.0 0.33

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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
u^*_{rel} = 96
%Regularity
$g^*_{H,rel}$ = −385
$g^*_{C,rel}$ = 62

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

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

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

*LAB*LAB*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	1.0	0.664 (1.0)
*cmyn3**	0.5	0.0	0.336 (0.0)
*olvi4**	0.5	1.0	0.664 1.0
*cmyn4**	0.5	0.0	0.336 0.0

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

*LAB*LAB*	73.3	−29.59	5.45
*LAB*LABa*	73.3	−30.23	2.28
*LAB*TCHa*	75.0	30.33	175.69

relative* CIELAB *lab*

*lab*lab*	0.712	−0.497	0.038
*lab*tch*	0.75	0.5	0.488
*lab*nch*	0.0	0.5	0.488

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

*lab*lrj*	0.712	−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	0.5	0.164 (1.0)
*cmyn3**	1.0	0.5	0.836 (0.0)
*olvi4**	0.5	1.0	0.664 0.5
*cmyn4**	0.5	0.0	0.336 0.5

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

*LAB*LAB*	34.57	−29.21	2.89
*LAB*LABa*	34.57	−30.23	2.29
*LAB*TCHa*	25.01	30.33	175.68

relative* CIELAB *lab*

*lab*lab*	0.212	−0.497	0.038
*lab*tch*	0.25	0.5	0.488
*lab*nch*	0.5	0.5	0.488

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

*lab*lrj*	0.212	−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	1.0	0.329 (1.0)
*cmyn3**	1.0	0.0	0.671 (0.0)
*olvi4**	0.0	1.0	0.329 1.0
*cmyn4**	1.0	0.0	0.671 0.0

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

*LAB*LAB*	51.02	−59.62	6.26
*LAB*LABa*	51.02	−60.48	4.56
*LAB*TCHa*	50.0	60.66	175.69

relative* CIELAB *lab*

*lab*lab*	0.425	−0.996	0.075
*lab*tch*	0.5	1.0	0.488
*lab*nch*	0.0	1.0	0.488

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

*lab*lrj*	0.425	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	j99g

*n** = 0,00

blackness *n**

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

chromaticness *c**

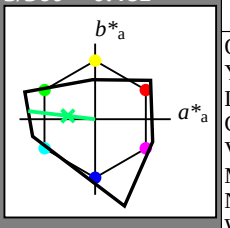
*n** = 1,0

Output: Colorimetric Television Luminous System TLS00

for hue *h** = *lab*h* = 173/360 = 0.481
*lab*tch* and *lab*nch*

A: hue G
LCH*Ma: 78 89 173
olv*Ma: 0.0 1.0 0.43

triangle lightness *t**



TLS00; adapted (a) CIELAB data

	*L**=*L**a	*a**a	*b**a	*C**ab,a	*h**ab,a
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
u^*_{rel} = 141
%Regularity
$g^*_{H,rel}$ = 39
$g^*_{C,rel}$ = 43

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

*olvi3**	1.0	1.0	(1.0)
*cmyn3**	0.0	0.0	(0.0)
*olvi4**	1.0	1.0	1.0
*cmyn4**	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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	1.0	0.715 (1.0)
*cmyn3**	0.5	0.0	0.285 (0.0)
*olvi4**	0.5	1.0	0.716 1.0
*cmyn4**	0.5	0.0	0.284 0.0

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

*LAB*LAB*	86.63	−44.26	5.34
*LAB*LABa*	86.63	−44.26	5.34
*LAB*TCHa*	75.0	44.59	173.12

relative* CIELAB *lab*

*lab*lab*	0.908	−0.495	0.06
*lab*tch*	0.75	0.5	0.481
*lab*nch*	0.0	0.5	0.481

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

*lab*lrj*	0.908	−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	0.5	0.215 (1.0)
*cmyn3**	1.0	0.5	0.785 (0.0)
*olvi4**	0.5	1.0	0.715 0.5
*cmyn4**	0.5	0.0	0.285 0.5

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

*LAB*LAB*	38.94	−44.26	5.35
*LAB*LABa*	38.94	−44.26	5.35
*LAB*TCHa*	25.01	44.59	173.11

relative* CIELAB *lab*

*lab*lab*	0.408	−0.495	0.06
*lab*tch*	0.25	0.5	0.481
*lab*nch*	0.5	0.5	0.481

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

*lab*lrj*	0.408	−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	1.0	0.431 (1.0)
*cmyn3**	1.0	0.0	0.569 (0.0)
*olvi4**	0.0	1.0	0.431 1.0
*cmyn4**	1.0	0.0	0.569 0.0

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

*LAB*LAB*	77.85	−88.52	10.69
*LAB*LABa*	77.85	−88.52	10.69
*LAB*TCHa*	50.0	89.18	173.12

relative* CIELAB *lab*

*lab*lab*	0.816	−0.992	0.12
*lab*tch*	0.5	1.0	0.481
*lab*nch*	0.0	1.0	0.481

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

*lab*lrj*	0.816	−0.999	0.0
*lab*tce*	0.5	1.0	0.5
*lab*ncE*	0.0	1.0	j99g

*n** = 0,00

blackness *n**

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

chromaticness *c**

*n** = 1,0

RE100−7, 3 step scales for constant CIELAB hue 176/360 = 0.488 (left)

3 step scales for constant CIELAB hue 173/360 = 0.481 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*

See for similar files: http://www.ps.bam.de/RE10/
Technical information: http://www.ps.bam.de Version 2.1, io=1,1?

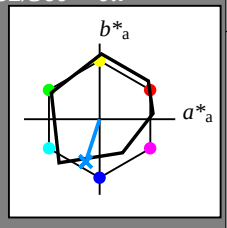
BAM registration: 20060101-RE10/10L/L10E09SP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/RE10/ Form: 10/10Serie: 1/1, Page: 10 Page: count: 10

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 252/360 = 0.7$
*lab*tch* and *lab*nch*

A: hue B
LCH*Ma: 40 55 252
olv*Ma: 0.0 0.56 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	64.42	50.58	81.9	38
Y_{Ma}	92.62	2.41	86.36	86.39	88
L_{Ma}	50.9	−63.82	35.02	72.81	151
C_{Ma}	51.25	−53.68	−57.69	78.82	227
V_{Ma}	25.72	30.34	−44.37	53.76	304
M_{Ma}	56.25	70.59	7.57	70.99	6
N_{Ma}	18.11	0.0	0.0	0.0	0
W_{Ma}	95.6	0.0	0.0	0.0	0
R_{CIE}	47.79	60.85	41.08	73.41	34
J_{CIE}	83.82	6.52	66.9	67.22	84
G_{CIE}	49.0	−36.83	2.78	36.95	176
B_{CIE}	25.14	−18.35	−56.22	59.15	252

%Gamut
$u^*_{rel} = 96$
%Regularity
$g^*_{H,rel} = -385$
$g^*_{C,rel} = 62$

***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*	95.6	0.43	4.65
*LAB*LABa*	95.6	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*	56.86	0.8	2.08
*LAB*LABa*	56.86	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*	18.12	1.18	−0.49
*LAB*LABa*	18.12	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	0.781	1.0	(1.0)
*cmyn3**	0.5	0.219	0.0	(0.0)
*olvi4**	0.5	0.781	1.0	1.0
*cmyn4**	0.5	0.219	0.0	0.0

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

*LAB*LAB*	67.84	−7.76	−23.11
*LAB*LABa*	67.84	−8.46	−25.92
*LAB*TCHa*	75.0	27.28	251.91

relative* CIELAB *lab*

*lab*lab*	0.642	−0.154	−0.474
*lab*tch*	0.75	0.5	0.7
*lab*nch*	0.0	0.5	0.7

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

*lab*lrj*	0.642	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	0.281	0.5	(1.0)
*cmyn3**	1.0	0.719	0.5	(0.0)
*olvi4**	0.5	0.781	1.0	0.5
*cmyn4**	0.5	0.219	0.0	0.5

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

*LAB*LAB*	29.1	−7.38	−25.68
*LAB*LABa*	29.1	−8.45	−25.92
*LAB*TCHa*	25.01	27.28	251.92

relative* CIELAB *lab*

*lab*lab*	0.142	−0.154	−0.474
*lab*tch*	0.25	0.5	0.7
*lab*nch*	0.5	0.5	0.7

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

*lab*lrj*	0.142	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	0.563	1.0	(1.0)
*cmyn3**	1.0	0.437	0.0	(0.0)
*olvi4**	0.0	0.563	1.0	1.0
*cmyn4**	1.0	0.437	0.0	0.0

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

*LAB*LAB*	40.09	−15.96	−50.88
*LAB*LABa*	40.09	−16.93	−51.85
*LAB*TCHa*	50.0	54.56	251.91

relative* CIELAB *lab*

*lab*lab*	0.284	−0.309	−0.949
*lab*tch*	0.5	1.0	0.7
*lab*nch*	0.0	1.0	0.7

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

*lab*lrj*	0.284	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^*

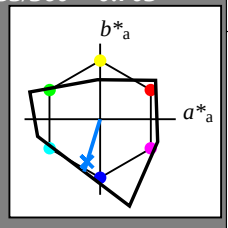
$n^* = 1{,}0$

Output: Colorimetric Television Luminous System TLS00

for hue $h^* = lab^*h = 253/360 = 0.703$
*lab*tch* and *lab*nch*

A: hue B
LCH*Ma: 45 72 253
olv*Ma: 0.0 0.49 1.0

triangle lightness t^*



TLS00; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	65.56	73.34	51.39	89.55	35
Y_{Ma}	94.78	−3.49	52.24	52.36	94
L_{Ma}	77.48	−92.97	36.0	99.71	159
C_{Ma}	78.36	−82.69	−22.74	85.77	195
V_{Ma}	12.55	38.81	−114.81	121.2	289
M_{Ma}	66.71	76.08	−29.8	81.71	339
N_{Ma}	0.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	47.79	61.74	42.56	74.99	35
J_{CIE}	83.82	7.06	70.78	71.13	84
G_{CIE}	49.0	−35.95	4.34	36.22	173
B_{CIE}	25.14	−17.24	−56.24	58.84	253

%Gamut
$u^*_{rel} = 141$
%Regularity
$g^*_{H,rel} = 39$
$g^*_{C,rel} = 43$

***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*	47.72	0.0	0.0
*LAB*LABa*	47.72	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*	0.03	0.0	0.0
*LAB*LABa*	0.03	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**	0.5	0.747	1.0	(1.0)
*cmyn3**	0.5	0.253	0.0	(0.0)
*olvi4**	0.5	0.747	1.0	1.0
*cmyn4**	0.5	0.253	0.0	0.0

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

*LAB*LAB*	70.24	−10.62	−34.63
*LAB*LABa*	70.24	−10.62	−34.63
*LAB*TCHa*	75.0	36.24	252.94

relative* CIELAB *lab*

*lab*lab*	0.736	−0.146	−0.477
*lab*tch*	0.75	0.5	0.703
*lab*nch*	0.0	0.5	0.703

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

*lab*lrj*	0.736	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	0.247	0.5	(1.0)
*cmyn3**	1.0	0.753	0.5	(0.0)
*olvi4**	0.5	0.747	1.0	0.5
*cmyn4**	0.5	0.253	0.0	0.5

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

*LAB*LAB*	22.55	−10.61	−34.64
*LAB*LABa*	22.55	−10.61	−34.64
*LAB*TCHa*	25.01	36.24	252.96

relative* CIELAB *lab*

*lab*lab*	0.236	−0.145	−0.477
*lab*tch*	0.25	0.5	0.703
*lab*nch*	0.5	0.5	0.703

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

*lab*lrj*	0.236	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	0.494	1.0	(1.0)
*cmyn3**	1.0	0.506	0.0	(0.0)
*olvi4**	0.0	0.494	1.0	1.0
*cmyn4**	1.0	0.506	0.0	0.0

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

*LAB*LAB*	45.08	−21.24	−69.28
*LAB*LABa*	45.08	−21.24	−69.28
*LAB*TCHa*	50.0	72.48	252.95

relative* CIELAB *lab*

*lab*lab*	0.472	−0.292	−0.955
*lab*tch*	0.5	1.0	0.703
*lab*nch*	0.0	1.0	0.703

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

*lab*lrj*	0.472	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^*

$n^* = 1{,}0$

RE100−7, 3 step scales for constant CIELAB hue 252/360 = 0.7 (left)

3 step scales for constant CIELAB hue 253/360 = 0.703 (right)

BAM-test chart RE10; Colorimetric systems ORS18 & ORS18
A: 2 coordinate data of 3 step colour scales for 10 hues

input: *olv* setrgbcolor*
output: *Startup (S) data dependend*