See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

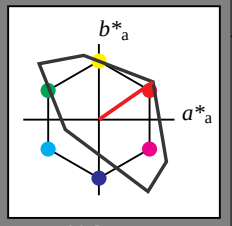
BAM registration: 20060101-OE56/10S/S56E00NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 1/10, Serie: 1/1, Page: 1 Page: count: 1

Input: Colorimetric Television Luminous System TLS18

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

D65: hue O
LCH*Ma: 53 87 35
olv*Ma: 1.0 0.0 0.0

triangle lightness t^*

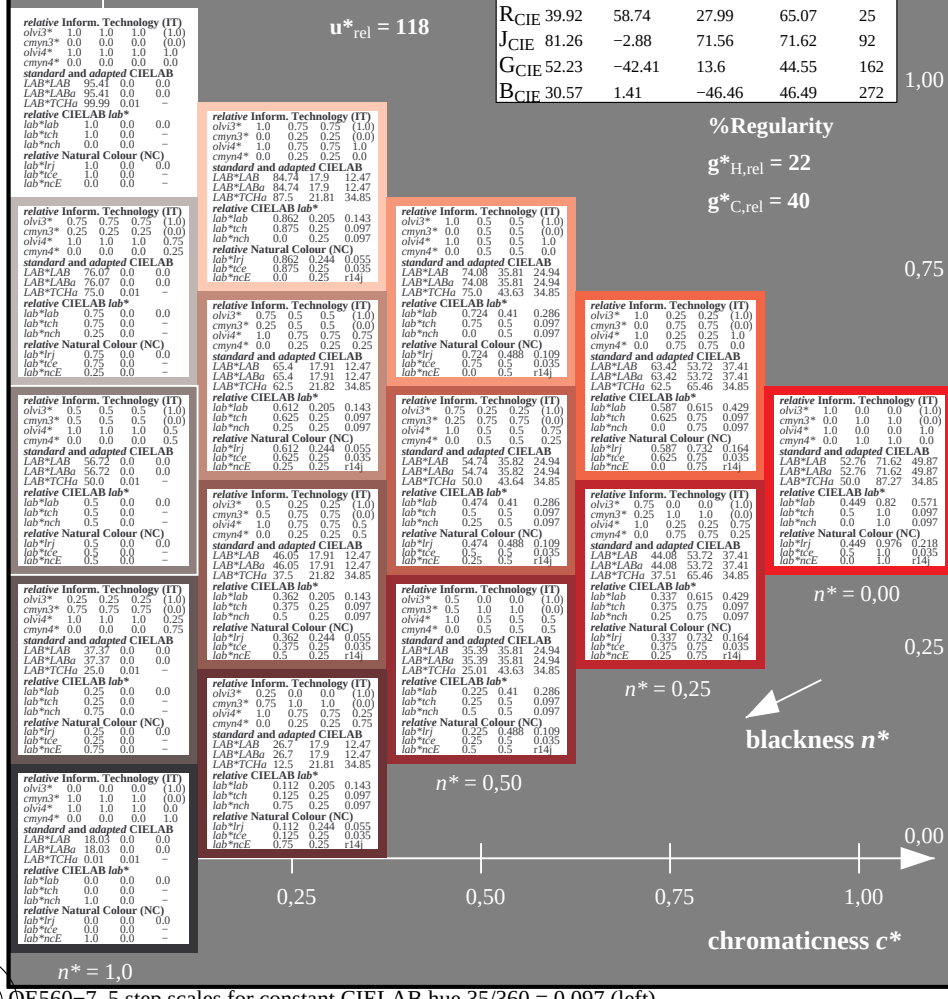


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40



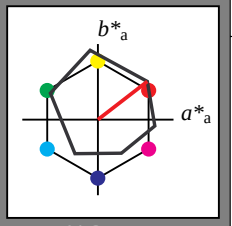
OE560−7, 5 step scales for constant CIELAB hue 35/360 = 0.097 (left)

Output: 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^*

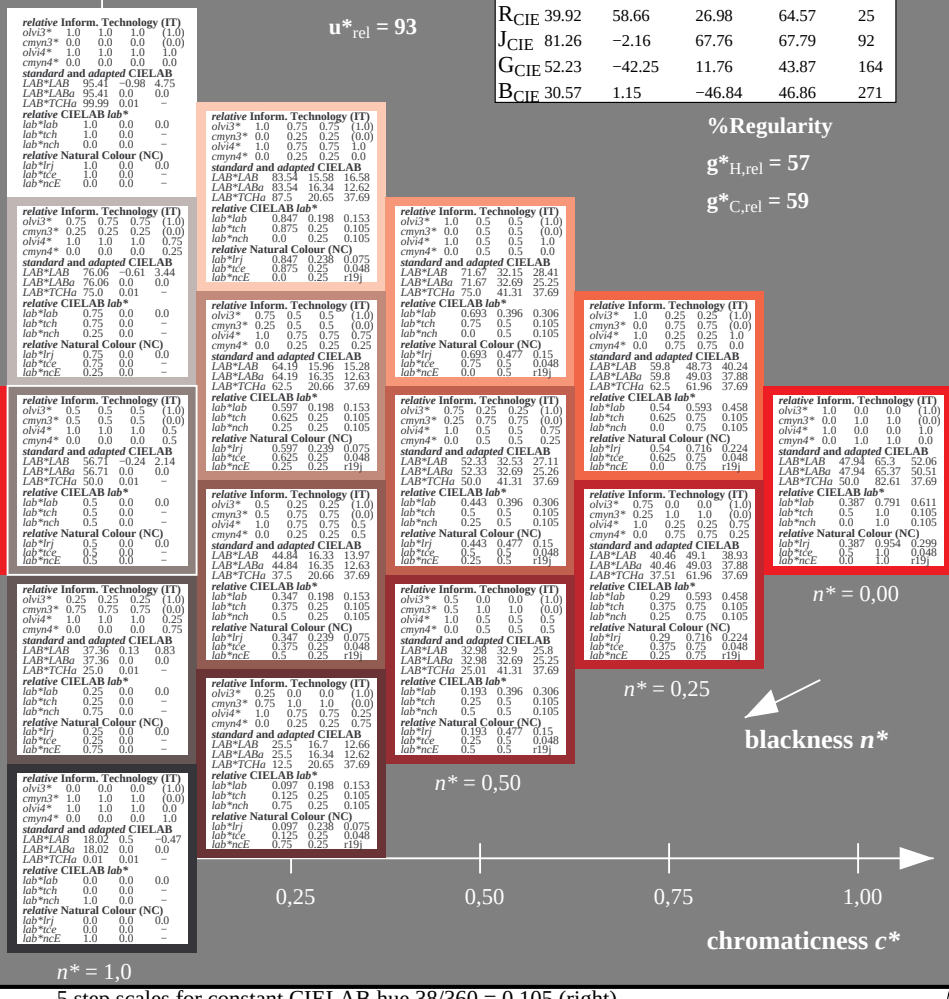


%Gamut
u^*_{rel} = 93

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

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



5 step scales for constant CIELAB hue 38/360 = 0.105 (right)

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

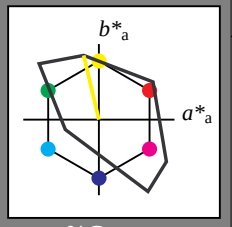
BAM registration: 20060101-OE56/10S/S56E01NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 2/10, Serie: 1/1, Page: 2 Page: count: 2

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 103/360 = 0.287$
*lab*tch* and *lab*nch*

D65: hue Y
LCH*Ma: 93 87 103
olv*Ma: 1.0 1.0 0.0

triangle lightness t^*



%Gamut
$u^*_{rel} = 118$

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

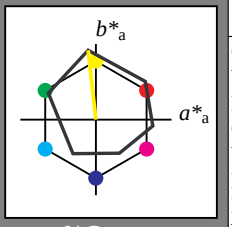
%Regularity
$g^*_{H,rel} = 22$
$g^*_{C,rel} = 40$

Output: 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
$u^*_{rel} = 93$

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

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

OE560−7, 5 step scales for constant CIELAB hue 103/360 = 0.287 (left)
5 step scales for constant CIELAB hue 96/360 = 0.268 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

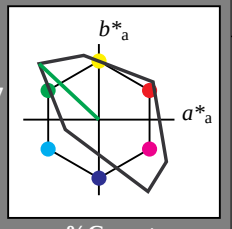
BAM registration: 20060101-OE56/10S/S56E02NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 3/10, Serie: 1/1, Page: 3 Page: count: 3

Input: Colorimetric Television Luminous System TLS18

for hue *h* = lab*h = 137/360 = 0.38*
lab*tch* and *lab*nch

D65: hue L
LCH*Ma: 84 108 137
olv*Ma: 0.0 1.0 0.0

triangle lightness *t**



%Gamut

u*rel = 118

TLS18; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

g*H,rel = 22

g*C,rel = 40

1,00

0,75

0,25

0,00

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

blackness *n**

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

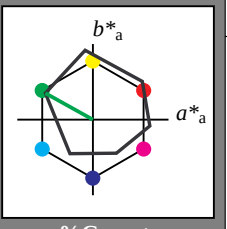
chromaticness *c**

Output: 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**



%Gamut

u*rel = 93

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

%Regularity

g*H,rel = 57

g*C,rel = 59

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

blackness *n**

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

chromaticness *c**

OE560−7, 5 step scales for constant CIELAB hue 137/360 = 0.38 (left)

5 step scales for constant CIELAB hue 151/360 = 0.419 (right)

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

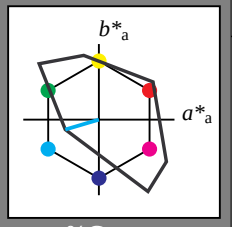
BAM registration: 20060101-OE56/10S/S56E03NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 4/10, Serie: 1/1, Page: 4 Page: count: 4

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 196/360 = 0.546$
*lab*tch* and *lab*nch*

D65: hue C
LCH*Ma: 87 46 196
olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

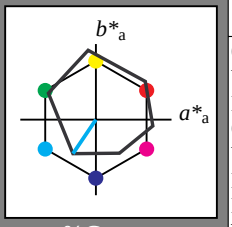
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

Output: 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^*

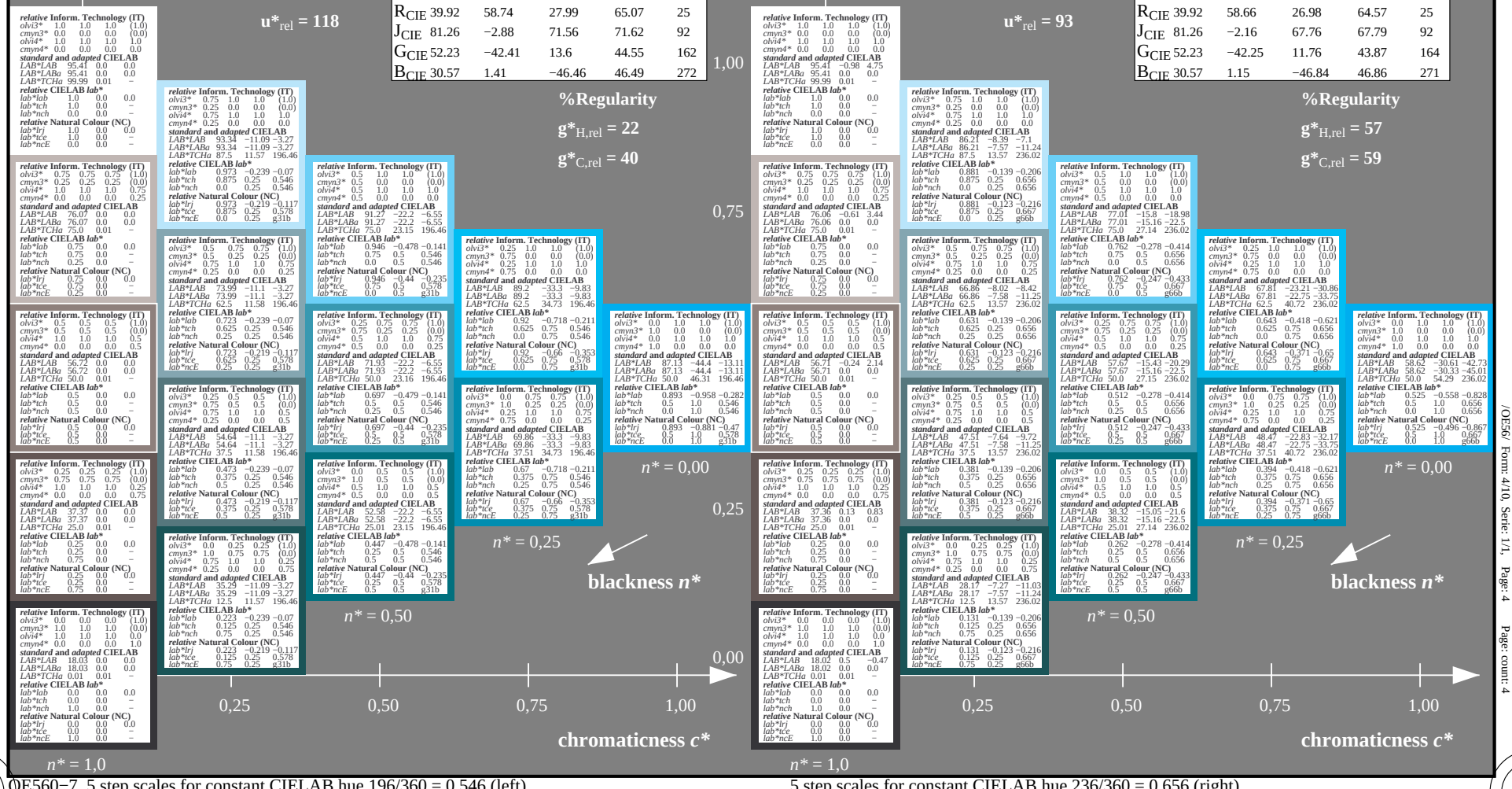


%Gamut
u^*_{rel} = 93

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

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



OE560−7, 5 step scales for constant CIELAB hue 196/360 = 0.546 (left)

5 step scales for constant CIELAB hue 236/360 = 0.656 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

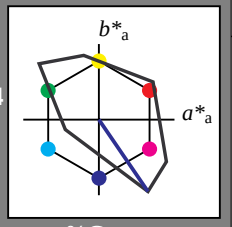
BAM registration: 20060101-OE56/10S/S56E04NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 5/10, Serie: 1/1, Page: 5 Page: count: 5

Input: Colorimetric Television Luminous System TLS18

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

D65: hue V
LCH*Ma: 35 115 304
olv*Ma: 0.0 0.0 1.0

triangle lightness t^*



%Gamut

u^*_{rel} = 118

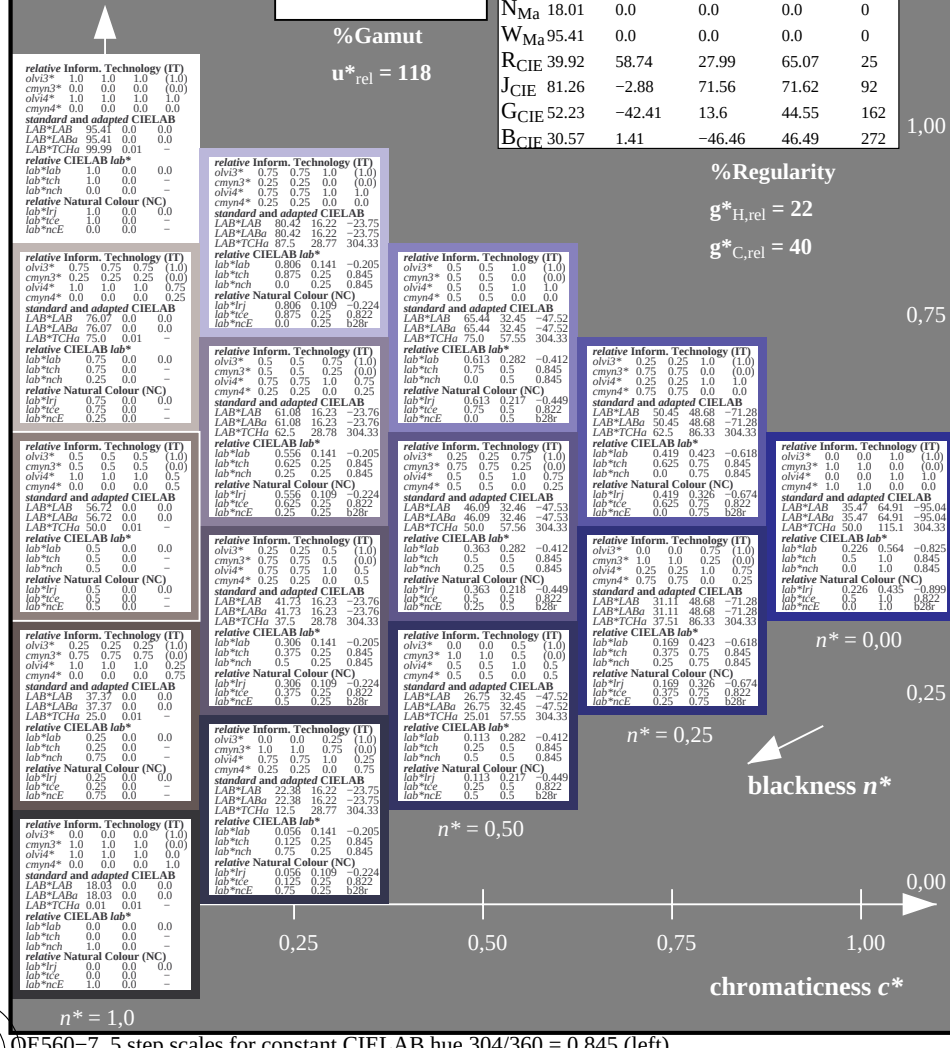
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40

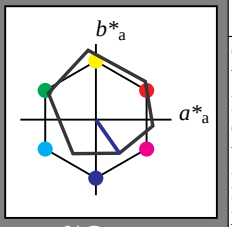


Output: Colorimetric Offset Reflective System ORS18

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

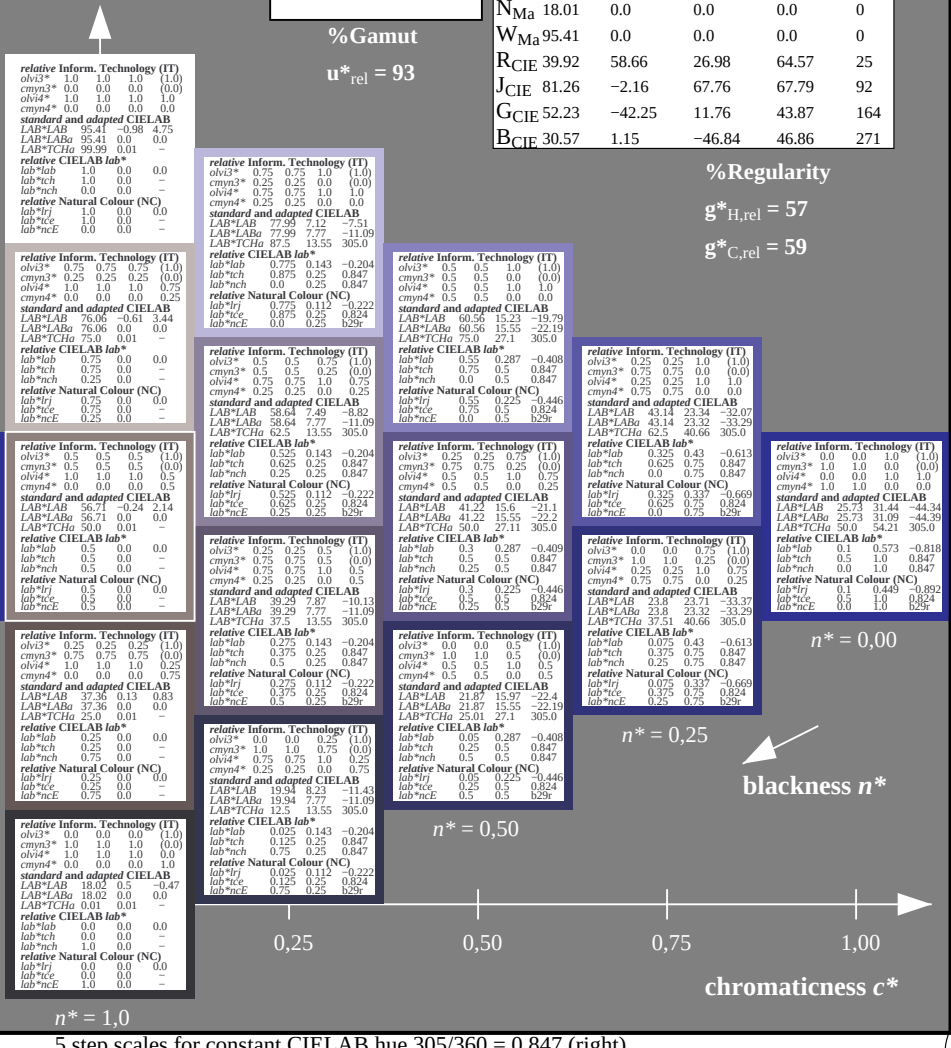
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Regularity

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

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



OE560−7, 5 step scales for constant CIELAB hue 304/360 = 0.845 (left)

5 step scales for constant CIELAB hue 305/360 = 0.847 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

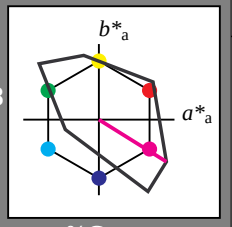
BAM registration: 20060101-OE56/10S/S56E05NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 6/10, Serie: 1/1, Page: 6 Page: count: 6

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 328/360 = 0.911$
lab*tch* and *lab*nch

D65: hue M
LCH*Ma: 59 105 328
olv*Ma: 1.0 0.0 1.0

triangle lightness t^*

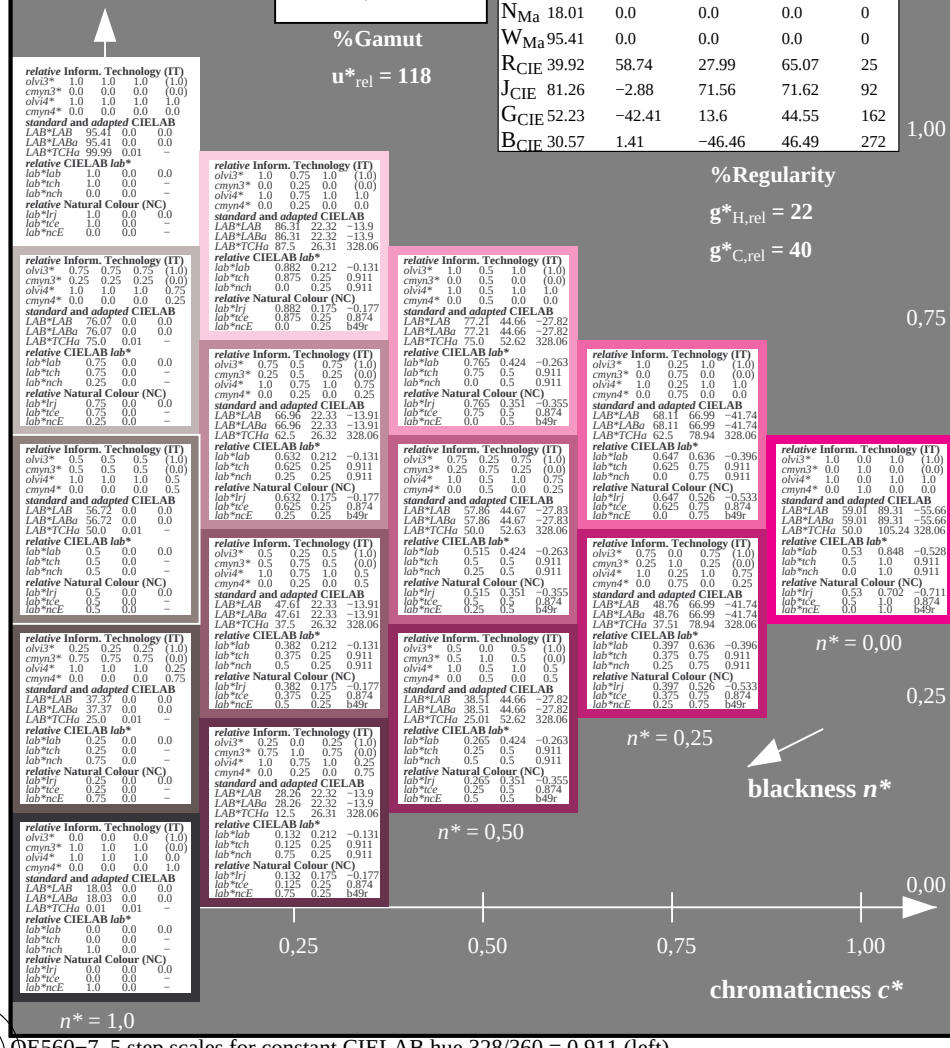


%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

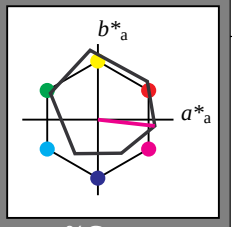


Output: Colorimetric Offset Reflective System ORS18

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^*

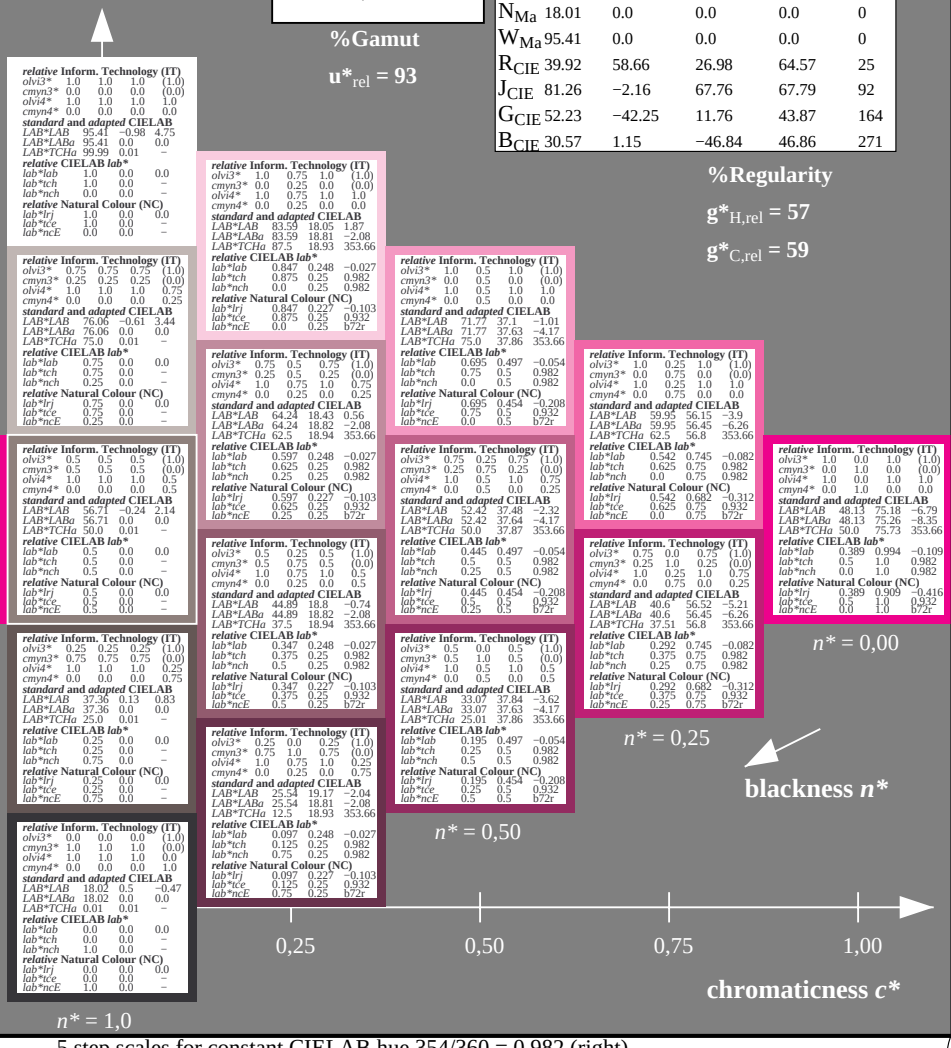


%Gamut
u^*_{rel} = 93

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

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



OE560−7, 5 step scales for constant CIELAB hue 328/360 = 0.911 (left)

5 step scales for constant CIELAB hue 354/360 = 0.982 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

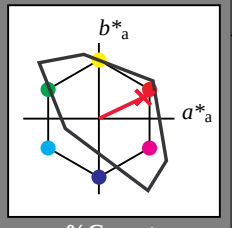
BAM registration: 20060101-OE56/10S/S56E06NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 7/10, Serie: 1/1, Page: 7 Page: count: 7

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 25/360 = 0.071$
*lab*tch* and *lab*nch*

D65: hue R
LCH*Ma: 54 82 25
olv*Ma: 1.0 0.0 0.14

triangle lightness t^*



%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

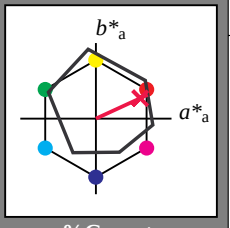
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

Output: 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^*

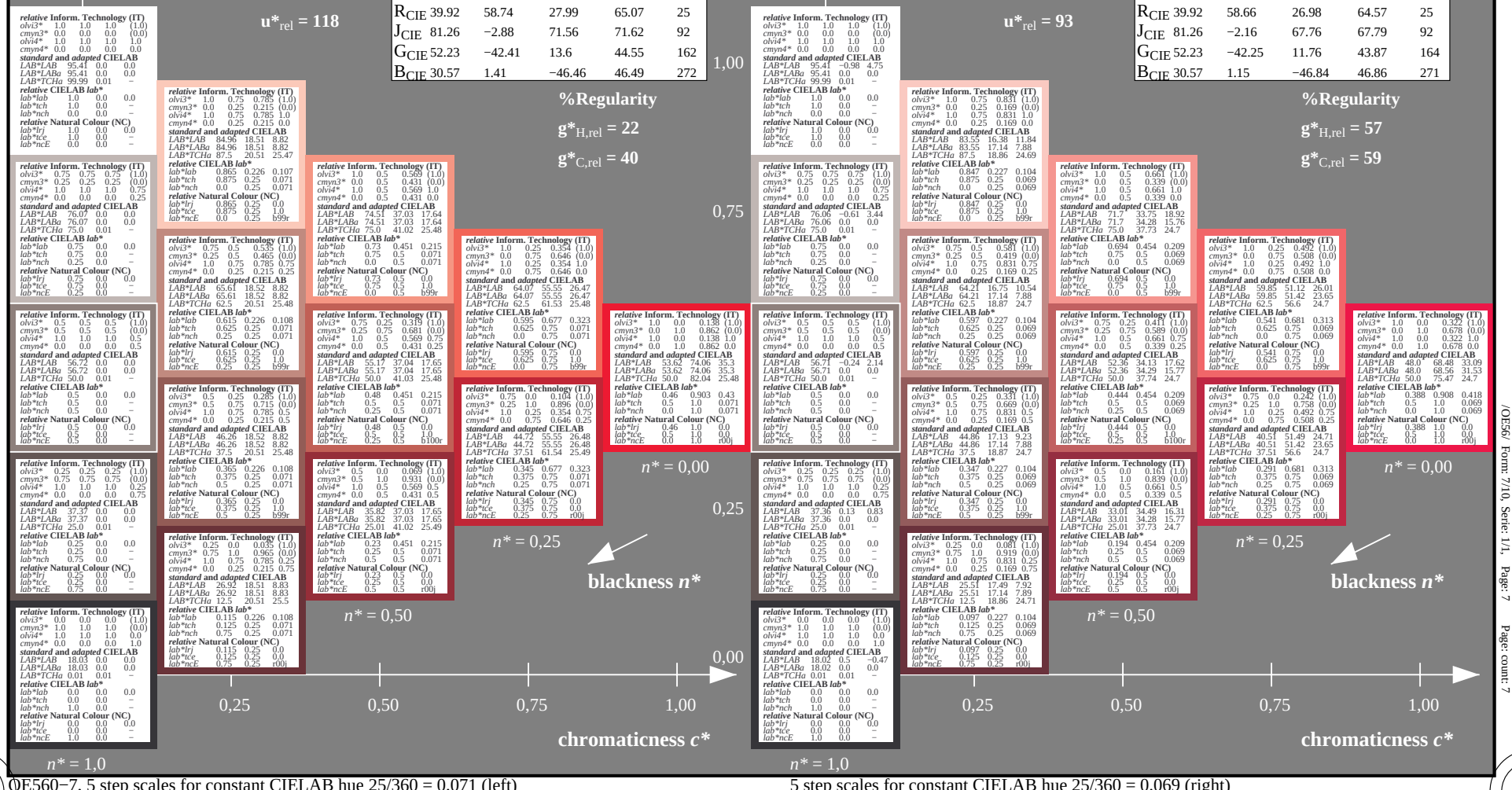


%Gamut
u^*_{rel} = 93

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

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



OE560−7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)
5 step scales for constant CIELAB hue 25/360 = 0.069 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

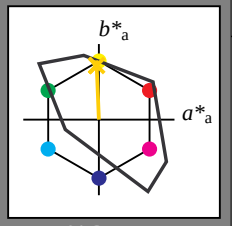
BAM registration: 20060101-OE56/10S/S56E07NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 8/10, Serie: 1/1, Page: 8 Page: count: 8

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 92/360 = 0.256$
*lab*tch* and *lab*nch*

D65: hue J
LCH*Ma: 85 79 92
olv*Ma: 1.0 0.82 0.0

triangle lightness t^*



%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

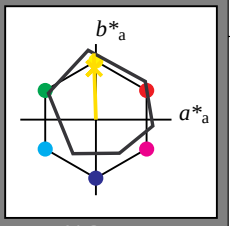
%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

Output: 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^*

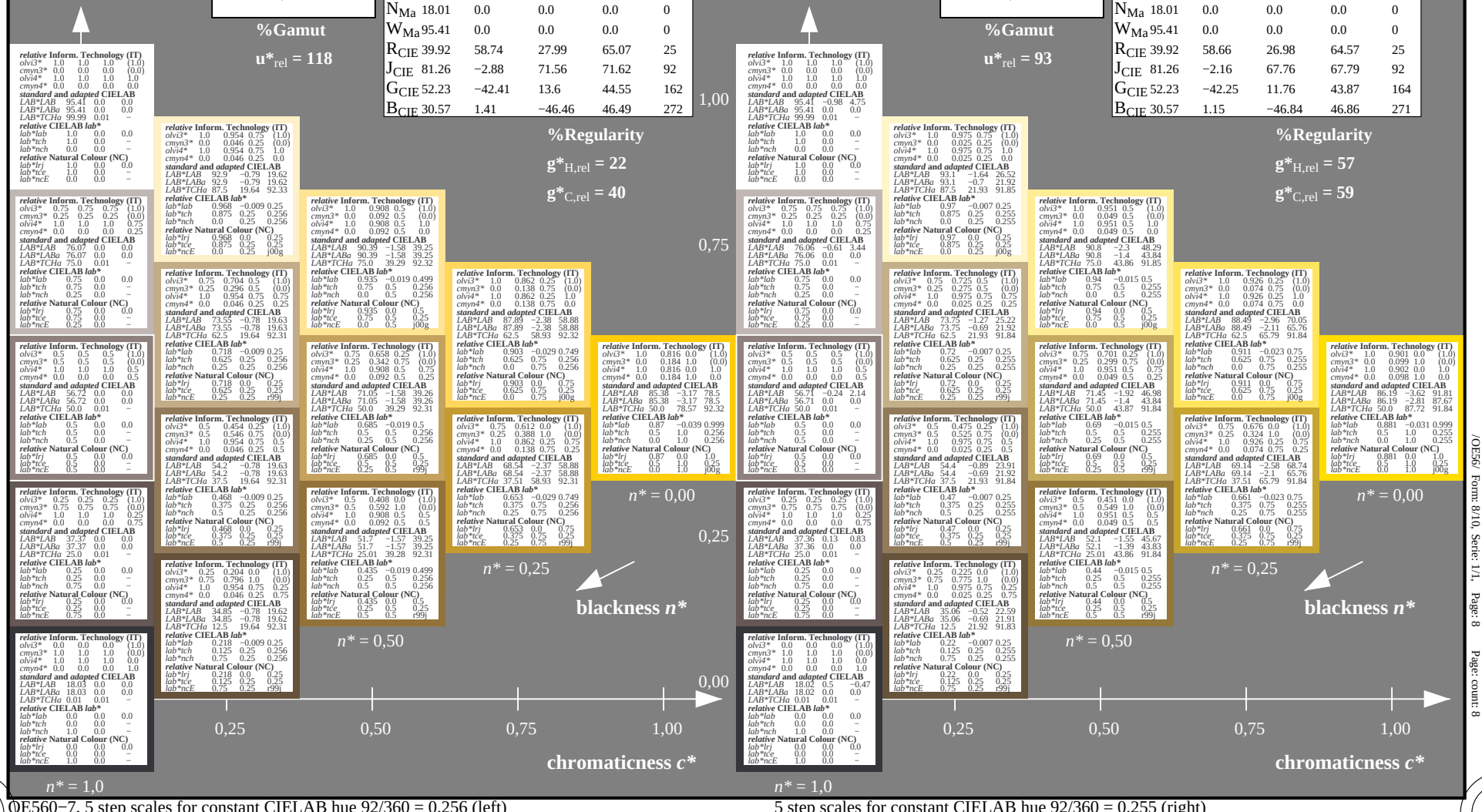


%Gamut
u^*_{rel} = 93

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

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



OE560−7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

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

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

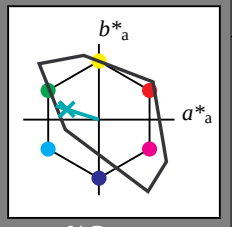
BAM registration: 20060101-OE56/10S/S56E08NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 9/10, Serie: 1/1, Page: 9 Page: count: 9

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 162/360 = 0.451$
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 86 60 162
olv*Ma: 0.0 1.0 0.64

triangle lightness t^*



%Gamut

u^*_{rel} = 118

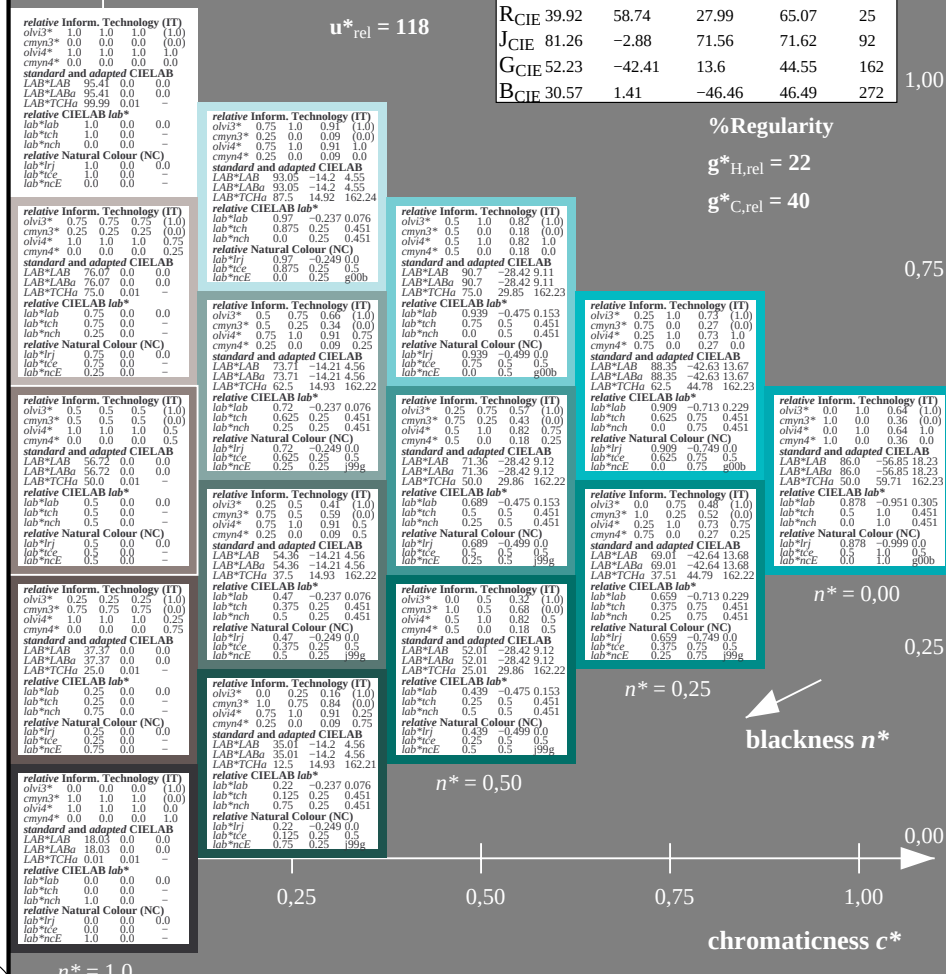
TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity

$g^*_{H,rel}$ = 22

$g^*_{C,rel}$ = 40



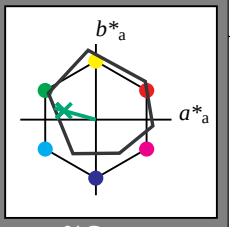
OE560−7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

Output: 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^*



%Gamut

u^*_{rel} = 93

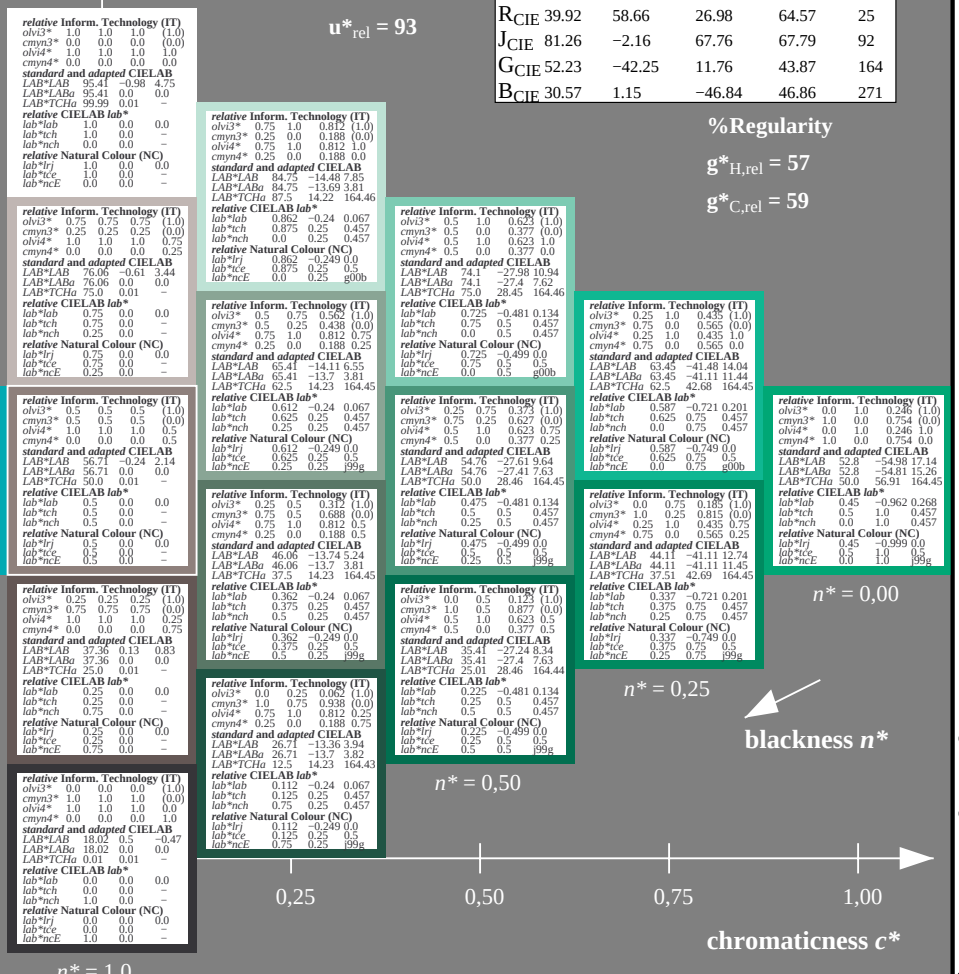
ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	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

%Regularity

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

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



5 step scales for constant CIELAB hue 164/360 = 0.457 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*

See for similar files: http://www.ps.bam.de/OE56/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

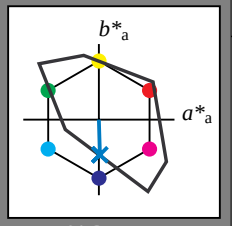
BAM registration: 20060101-OE56/10S/S56E09NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta
/OE56/ Form: 10/10,Serie: 1/1, Page: 10 Page: count: 10

Input: Colorimetric Television Luminous System TLS18

for hue $h^* = lab^*h = 272/360 = 0.755$
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 65 48 272
olv*Ma: 0.0 0.58 1.0

triangle lightness t^*



%Gamut
u^*_{rel} = 118

TLS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	52.76	71.63	49.88	87.29	35
Y_{Ma}	92.74	−20.02	84.97	87.3	103
L_{Ma}	84.0	−78.98	73.94	108.2	137
C_{Ma}	87.14	−44.41	−13.11	46.32	196
V_{Ma}	35.47	64.92	−95.06	115.12	304
M_{Ma}	59.01	89.33	−55.67	105.26	328
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.74	27.99	65.07	25
J_{CIE}	81.26	−2.88	71.56	71.62	92
G_{CIE}	52.23	−42.41	13.6	44.55	162
B_{CIE}	30.57	1.41	−46.46	46.49	272

%Regularity
$g^*_{H,rel}$ = 22
$g^*_{C,rel}$ = 40

1,00

0,75

0,25

0,00

blackness n^*

chromaticness c^*

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

n^* = 1,0

n^* = 0,50

n^* = 0,25

n^* = 0,00

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* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 76.07 0.0 0.0
LAB*LABa 76.07 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*ncE 0.25 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 37.37 0.0 0.0
LAB*LABa 37.37 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*ncE 0.75 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* 0.75 0.895 1.0 (1.0)
cmyn3* 0.25 0.105 0.0 (0.0)
olvi4* 0.75 0.895 1.0 1.0
cmyn4* 0.25 0.105 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 87.92 0.35 −11.85
LAB*LABa 87.92 0.35 −11.85
LAB*TCHa 87.5 11.87 271.71
relative* CIELAB *lab*
lab*lab 0.903 0.007 −0.249
lab*tch 0.875 0.25 0.755
lab*nch 0.0 0.25 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.903 0.0 −0.249
lab*tce 0.875 0.25 0.75
lab*ncE 0.0 0.25 g99b

relative Inform. Technology (IT)
olvi3* 0.5 0.645 0.75 (1.0)
cmyn3* 0.5 0.355 0.25 (0.0)
olvi4* 0.75 0.895 1.0 0.75
cmyn4* 0.25 0.105 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 68.57 0.36 −11.86
LAB*LABa 68.57 0.36 −11.86
LAB*TCHa 62.5 11.88 271.74
relative* CIELAB *lab*
lab*lab 0.653 0.008 −0.249
lab*tch 0.625 0.25 0.755
lab*nch 0.25 0.25 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.653 0.0 −0.249
lab*tce 0.625 0.25 0.75
lab*ncE 0.25 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.395 0.5 (1.0)
cmyn3* 0.75 0.605 0.5 (0.0)
olvi4* 0.75 0.895 1.0 0.5
cmyn4* 0.25 0.105 0.0 0.5
***standard and adapted* CIELAB**
LAB*LAB 49.22 0.36 −11.86
LAB*LABa 49.22 0.36 −11.86
LAB*TCHa 37.5 11.88 271.74
relative* CIELAB *lab*
lab*lab 0.403 0.008 −0.249
lab*tch 0.375 0.25 0.755
lab*nch 0.5 0.25 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.403 0.0 −0.249
lab*tce 0.375 0.25 0.75
lab*ncE 0.5 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.145 0.25 (1.0)
cmyn3* 1.0 0.855 0.75 (0.0)
olvi4* 0.75 0.895 1.0 0.25
cmyn4* 0.25 0.105 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 29.88 0.36 −11.86
LAB*LABa 29.88 0.36 −11.86
LAB*TCHa 12.5 11.88 271.76
relative* CIELAB *lab*
lab*lab 0.153 0.008 −0.249
lab*tch 0.125 0.25 0.755
lab*nch 0.75 0.25 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.153 0.0 −0.249
lab*tce 0.125 0.25 0.75
lab*ncE 0.75 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.5 0.79 1.0 (1.0)
cmyn3* 0.5 0.21 0.0 (0.0)
olvi4* 0.5 0.79 1.0 1.0
cmyn4* 0.5 0.21 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 80.44 0.71 −23.73
LAB*LABa 80.44 0.71 −23.73
LAB*TCHa 75.0 23.75 271.72
relative* CIELAB *lab*
lab*lab 0.807 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 0.807 0.0 −0.499
lab*tce 0.75 0.5 0.75
lab*ncE 0.0 0.5 g99b

relative Inform. Technology (IT)
olvi3* 0.25 0.54 0.75 (1.0)
cmyn3* 0.75 0.46 0.25 (0.0)
olvi4* 0.5 0.79 1.0 0.75
cmyn4* 0.5 0.21 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 61.09 0.72 −23.74
LAB*LABa 61.09 0.72 −23.74
LAB*TCHa 50.0 23.76 271.74
relative* CIELAB *lab*
lab*lab 0.557 0.015 −0.499
lab*tch 0.5 0.5 0.755
lab*nch 0.25 0.5 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.557 0.0 −0.499
lab*tce 0.5 0.5 0.75
lab*ncE 0.25 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.79 0.5 (1.0)
cmyn3* 1.0 0.71 0.5 (0.0)
olvi4* 0.5 0.79 1.0 0.5
cmyn4* 0.5 0.21 0.0 0.5
***standard and adapted* CIELAB**
LAB*LAB 41.74 0.72 −23.74
LAB*LABa 41.74 0.72 −23.74
LAB*TCHa 25.01 23.76 271.75
relative* CIELAB *lab*
lab*lab 0.307 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 0.307 0.0 −0.499
lab*tce 0.25 0.5 0.75
lab*ncE 0.5 0.5 b00r

relative Inform. Technology (IT)
olvi3* 0.5 0.685 1.0 (1.0)
cmyn3* 0.75 0.315 0.0 (0.0)
olvi4* 0.25 0.686 1.0 1.0
cmyn4* 0.75 0.314 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 72.95 1.07 −35.6
LAB*LABa 72.95 1.07 −35.6
LAB*TCHa 62.5 35.63 271.73
relative* CIELAB *lab*
lab*lab 0.71 0.023 −0.749
lab*tch 0.625 0.75 0.755
lab*nch 0.0 0.75 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.71 0.0 −0.749
lab*tce 0.625 0.75 0.75
lab*ncE 0.0 0.75 g99b

relative Inform. Technology (IT)
olvi3* 0.0 0.435 0.75 (1.0)
cmyn3* 1.0 0.565 0.25 (0.0)
olvi4* 0.25 0.685 1.0 0.75
cmyn4* 0.75 0.315 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 53.6 1.09 −35.61
LAB*LABa 53.6 1.09 −35.61
LAB*TCHa 37.51 35.63 271.75
relative* CIELAB *lab*
lab*lab 0.46 0.023 −0.749
lab*tch 0.375 0.75 0.755
lab*nch 0.25 0.75 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.46 0.0 −0.749
lab*tce 0.375 0.75 0.75
lab*ncE 0.25 0.75 b00r

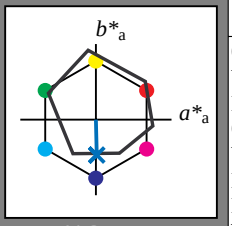
relative Inform. Technology (IT)
olvi3* 0.0 0.581 1.0 (1.0)
cmyn3* 1.0 0.419 0.0 (0.0)
olvi4* 0.0 0.581 1.0 0.75
cmyn4* 1.0 0.419 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 65.47 1.44 −47.47
LAB*LABa 65.47 1.44 −47.47
LAB*TCHa 50.0 47.5 271.74
relative* CIELAB *lab*
lab*lab 0.613 0.03 −0.998
lab*tch 0.5 1.0 0.755
lab*nch 0.0 1.0 0.755
***relative* Natural Colour (NC)**
lab*lrj 0.613 0.0 −0.999
lab*tce 0.5 1.0 0.75
lab*ncE 0.0 1.0 g99b

Output: 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^*



%Gamut
u^*_{rel} = 93

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

%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* 0.75 0.75 0.75 (1.0)
cmyn3* 0.25 0.25 0.25 (0.0)
olvi4* 1.0 1.0 1.0 0.75
cmyn4* 0.0 0.0 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 76.06 −0.61 3.44
LAB*LABa 76.06 0.0 0.0
LAB*TCHa 75.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.75 0.0 0.0
lab*tch 0.75 0.0 –
lab*nch 0.25 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.75 0.0 0.0
lab*tce 0.75 0.0 –
lab*ncE 0.25 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* 0.25 0.25 0.25 (1.0)
cmyn3* 0.75 0.75 0.75 (0.0)
olvi4* 1.0 1.0 1.0 0.25
cmyn4* 0.0 0.0 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 37.36 0.13 0.83
LAB*LABa 37.36 0.0 0.0
LAB*TCHa 25.0 0.01 –
relative* CIELAB *lab*
lab*lab 0.25 0.0 0.0
lab*tch 0.25 0.0 –
lab*nch 0.75 0.0 –
***relative* Natural Colour (NC)**
lab*lrj 0.25 0.0 0.0
lab*tce 0.25 0.0 –
lab*ncE 0.75 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* 0.75 0.872 1.0 (1.0)
cmyn3* 0.25 0.128 0.0 (0.0)
olvi4* 0.75 0.872 1.0 1.0
cmyn4* 0.25 0.128 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 82.0 −0.45 −7.31
LAB*LABa 82.0 0.27 −11.16
LAB*TCHa 87.5 11.18 271.39
relative* CIELAB *lab*
lab*lab 0.827 0.006 −0.249
lab*tch 0.875 0.25 0.754
lab*nch 0.0 0.25 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.827 0.0 −0.249
lab*tce 0.875 0.25 0.75
lab*ncE 0.0 0.25 g99b

relative Inform. Technology (IT)
olvi3* 0.5 0.622 0.75 (1.0)
cmyn3* 0.5 0.378 0.25 (0.0)
olvi4* 0.75 0.872 1.0 0.75
cmyn4* 0.25 0.128 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 62.65 −0.07 −8.62
LAB*LABa 62.65 0.27 −11.17
LAB*TCHa 62.5 11.18 271.41
relative* CIELAB *lab*
lab*lab 0.577 0.006 −0.249
lab*tch 0.625 0.25 0.754
lab*nch 0.25 0.25 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.577 0.0 −0.249
lab*tce 0.625 0.25 0.75
lab*ncE 0.25 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.25 0.372 0.5 (1.0)
cmyn3* 0.75 0.628 0.5 (0.0)
olvi4* 0.75 0.872 1.0 0.5
cmyn4* 0.25 0.128 0.0 0.5
***standard and adapted* CIELAB**
LAB*LAB 43.3 0.29 −9.93
LAB*LABa 43.3 0.27 −11.17
LAB*TCHa 37.5 11.18 271.41
relative* CIELAB *lab*
lab*lab 0.327 0.006 −0.249
lab*tch 0.375 0.25 0.754
lab*nch 0.5 0.25 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.327 0.0 −0.249
lab*tce 0.375 0.25 0.75
lab*ncE 0.5 0.25 b00r

relative Inform. Technology (IT)
olvi3* 0.0 0.122 0.25 (1.0)
cmyn3* 1.0 0.878 0.75 (0.0)
olvi4* 0.75 0.872 1.0 0.25
cmyn4* 0.25 0.128 0.0 0.75
***standard and adapted* CIELAB**
LAB*LAB 23.96 0.66 −11.23
LAB*LABa 23.96 0.28 −11.16
LAB*TCHa 12.5 11.18 271.43
relative* CIELAB *lab*
lab*lab 0.077 0.006 −0.249
lab*tch 0.125 0.25 0.754
lab*nch 0.75 0.25 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.077 0.0 −0.249
lab*tce 0.125 0.25 0.75
lab*ncE 0.75 0.25 b00r

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* 0.25 0.494 0.75 (1.0)
cmyn3* 0.75 0.506 0.25 (0.0)
olvi4* 0.5 0.744 1.0 0.75
cmyn4* 0.5 0.256 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 49.25 0.45 −20.7
LAB*LABa 49.25 0.55 −22.35
LAB*TCHa 50.0 22.36 271.41
relative* CIELAB *lab*
lab*lab 0.404 0.012 −0.499
lab*tch 0.5 0.5 0.754
lab*nch 0.25 0.5 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.404 0.0 −0.499
lab*tce 0.5 0.5 0.75
lab*ncE 0.25 0.5 b00r

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* 0.25 0.616 1.0 (1.0)
cmyn3* 0.75 0.384 0.0 (0.0)
olvi4* 0.25 0.616 1.0 1.0
cmyn4* 0.75 0.384 0.0 0.0
***standard and adapted* CIELAB**
LAB*LAB 55.19 0.61 −31.48
LAB*LABa 55.19 0.82 −33.52
LAB*TCHa 62.5 33.54 271.4
relative* CIELAB *lab*
lab*lab 0.48 0.018 −0.749
lab*tch 0.625 0.75 0.754
lab*nch 0.0 0.75 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.48 0.0 −0.749
lab*tce 0.625 0.75 0.75
lab*ncE 0.0 0.75 g99b

relative Inform. Technology (IT)
olvi3* 0.0 0.366 0.75 (1.0)
cmyn3* 1.0 0.634 0.25 (0.0)
olvi4* 0.25 0.616 1.0 0.75
cmyn4* 0.75 0.384 0.0 0.25
***standard and adapted* CIELAB**
LAB*LAB 35.84 0.98 −32.78
LAB*LABa 35.84 0.83 −33.52
LAB*TCHa 37.51 33.54 271.41
relative* CIELAB *lab*
lab*lab 0.23 0.019 −0.749
lab*tch 0.375 0.75 0.754
lab*nch 0.25 0.75 0.754
***relative* Natural Colour (NC)**
lab*lrj 0.23 0.0 −0.749
lab*tce 0.375 0.75 0.75
lab*ncE 0.25 0.75 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

OE560−7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

5 step scales for constant CIELAB hue 271/360 = 0.754 (right)

BAM-test chart OE56; Colorimetric systems TLS18 & ORS18
D65: 2 coordinate data of 5 step colour scales for 10 hues

input: *cmy0* setcmykcolor*
output: *no change compared to input*