See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

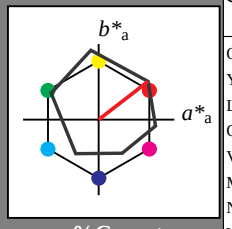
BAM registration: 20060101-UE41/10Q/Q41E00NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 1/10, Serie: 1/1, Page: 1 Page: count: 1

Input: Colorimetric 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
rgb*Ma: 1.0 0.0 0.0

triangle lightness



%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	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

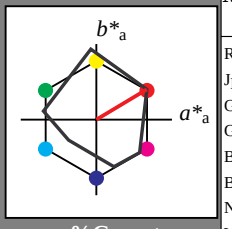
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

Output: Colorimetric Reflective System MRS18a

for hue *h* = lab*h = 31/360 = 0.086*
lab*tch* and *lab*nch

D65: hue R
LCH*Ma: 50 78 31
rgb*Ma: 1.0 0.0 0.0

triangle lightness

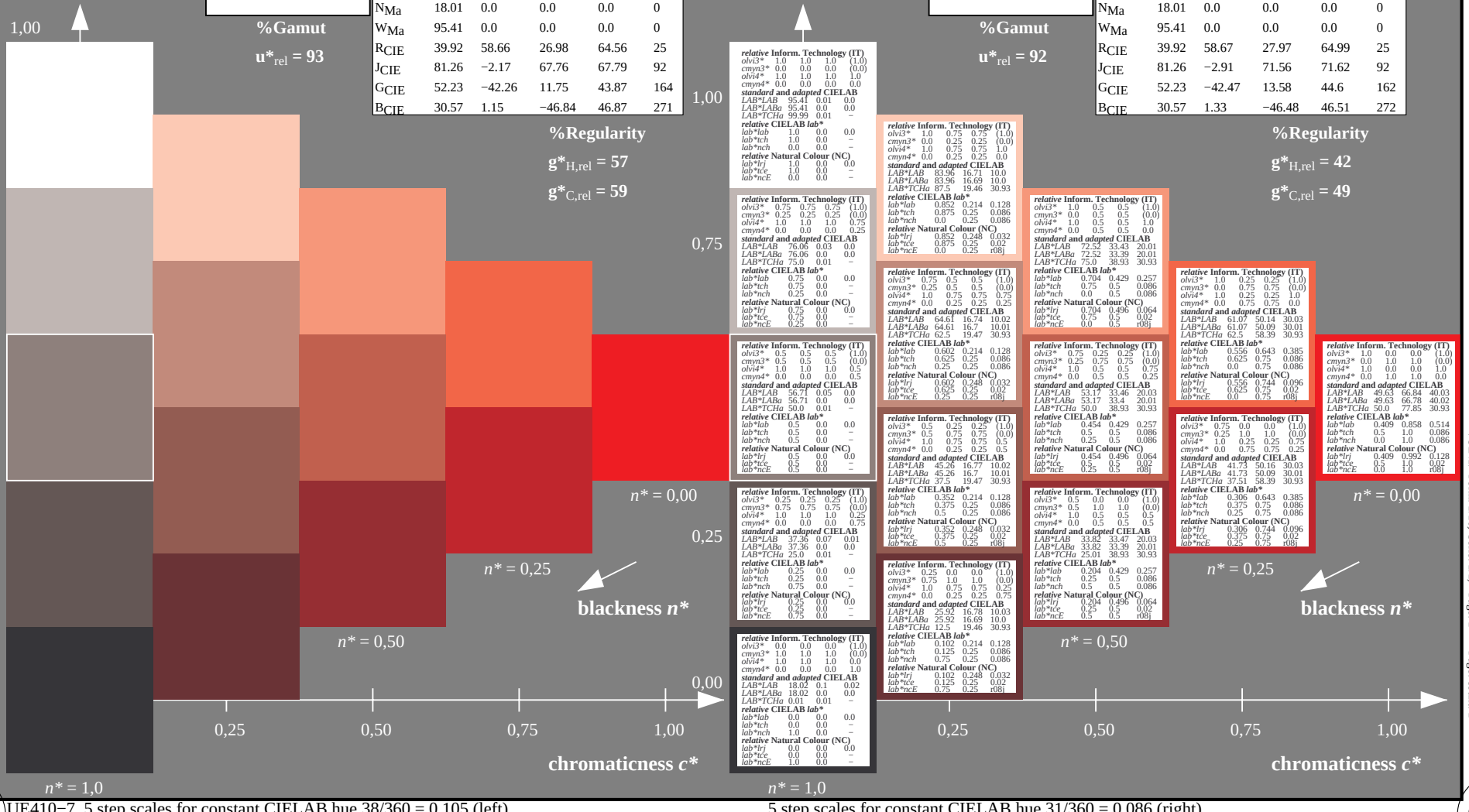


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



UE410−7, 5 step scales for constant CIELAB hue 38/360 = 0.105 (left)

5 step scales for constant CIELAB hue 31/360 = 0.086 (right)

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

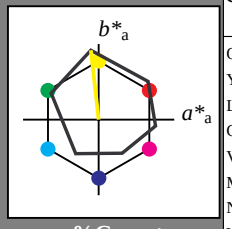
BAM registration: 20060101-UE41/10Q/Q41E01NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 2/10, Serie: 1/1, Page: 2 Page: count: 2

Input: Colorimetric 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
rgb*Ma: 1.0 1.0 0.0

triangle lightness



%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	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

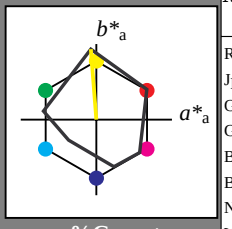
%Regularity
$g^*_{H,rel}$ = 57
$g^*_{C,rel}$ = 59

Output: Colorimetric Reflective System MRS18a

for hue $h^* = lab^*h = 94/360 = 0.262$
lab*tch* and *lab*nch

D65: hue J
LCH*Ma: 91 93 94
rgb*Ma: 1.0 1.0 0.0

triangle lightness

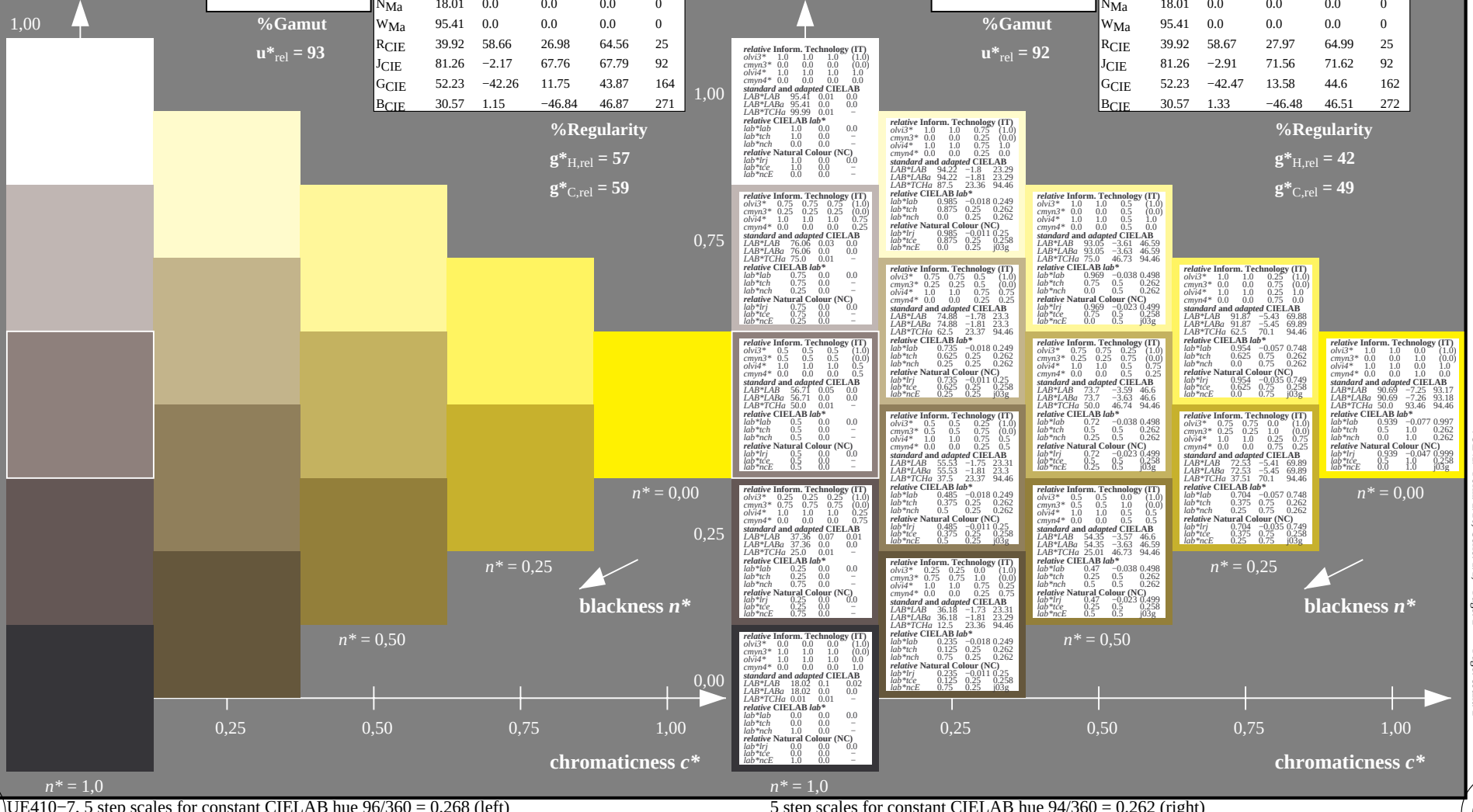


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



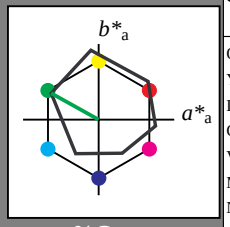
UE410−7, 5 step scales for constant CIELAB hue 96/360 = 0.268 (left)
5 step scales for constant CIELAB hue 94/360 = 0.262 (right)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

Input: Colorimetric 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
rgb*Ma: 0.0 1.0 0.0

triangle lightness



%Gamut
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

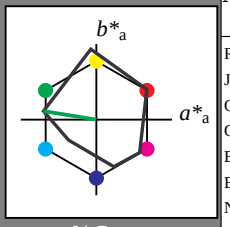
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

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

Output: Colorimetric Reflective System MRS18a
for hue *h = lab*h = 171/360 = 0.475**
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 52 71 171
rgb*Ma: 0.0 1.0 0.0

triangle lightness

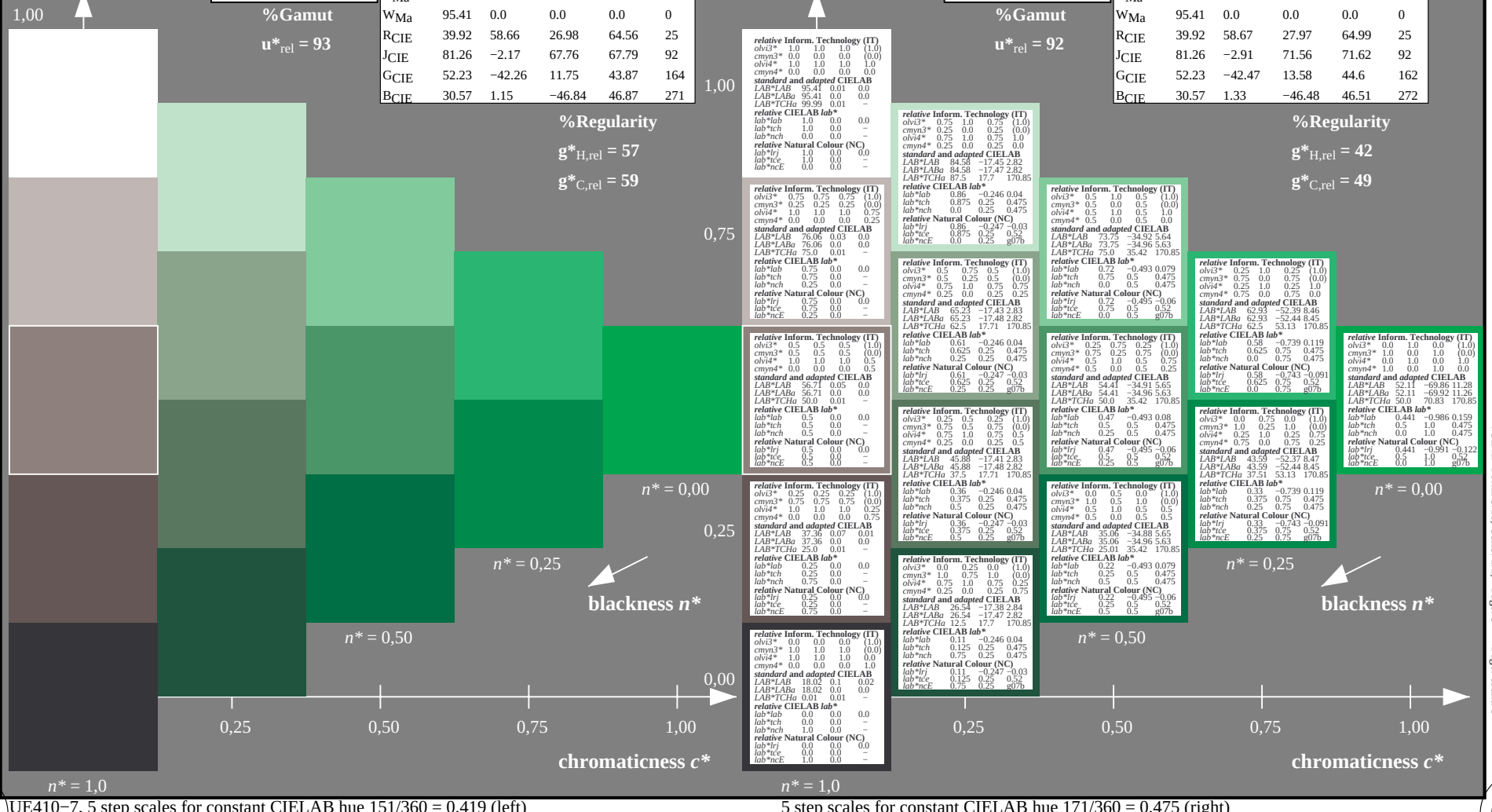


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



UE410−7, 5 step scales for constant CIELAB hue 151/360 = 0.419 (left)
5 step scales for constant CIELAB hue 171/360 = 0.475 (right)

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

BAM registration: 20060101-UE41/10Q/Q41E02NP.PS/.PDF
application for evaluation and measurement of printer or monitor systems
BAM material: code=rha4ta

/UE41/ Form: 3/10, Serie: 1/1, Page: 3 Page: count: 3

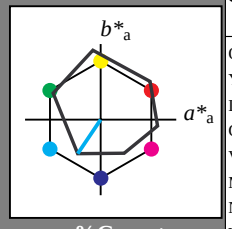
BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

Input: Colorimetric 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
rgb*Ma: 0.0 1.0 1.0

triangle lightness



%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	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

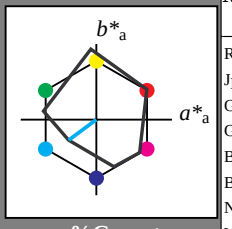
%Regularity
g*H,rel = 57
g*C,rel = 59

Output: Colorimetric Reflective System MRS18a

for hue *h = *lab*h* = 217/360 = 0.601**
lab*tch* and *lab*nch

D65: hue G50B
LCH*Ma: 45 46 217
rgb*Ma: 0.0 1.0 1.0

triangle lightness

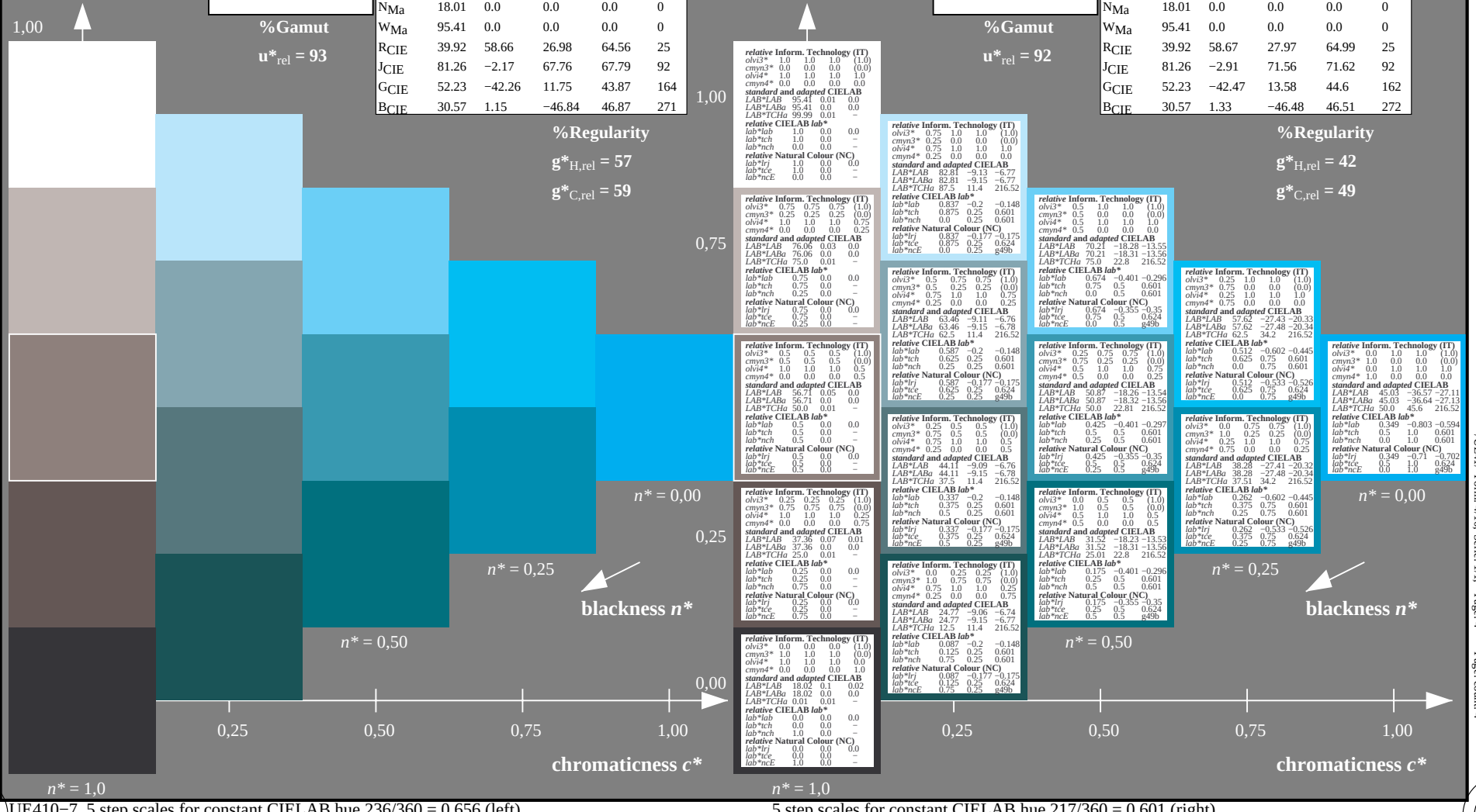


%Gamut
u*rel = 92

MRS18a; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
g*H,rel = 42
g*C,rel = 49



UE410−7, 5 step scales for constant CIELAB hue 236/360 = 0.656 (left)

5 step scales for constant CIELAB hue 217/360 = 0.601 (right)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

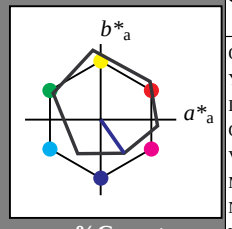
See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

BAM registration: 20060101-UE41/10Q/Q41E03NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 4/10, Serie: 1/1, Page: 4 Page: count: 4

Input: Colorimetric 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
rgb*Ma: 0.0 0.0 1.0

triangle lightness



%Gamut
u*rel = 93

ORS18; adapted (a) CIELAB data

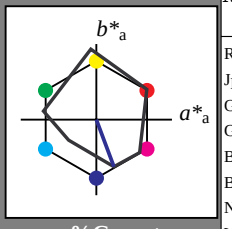
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

%Regularity
g*H,rel = 57
g*C,rel = 59

Output: Colorimetric Reflective System MRS18a
for hue *h = lab*h = 290/360 = 0.807**
lab*tch* and *lab*nch

D65: hue B
LCH*Ma: 37 66 290
rgb*Ma: 0.0 0.0 1.0

triangle lightness

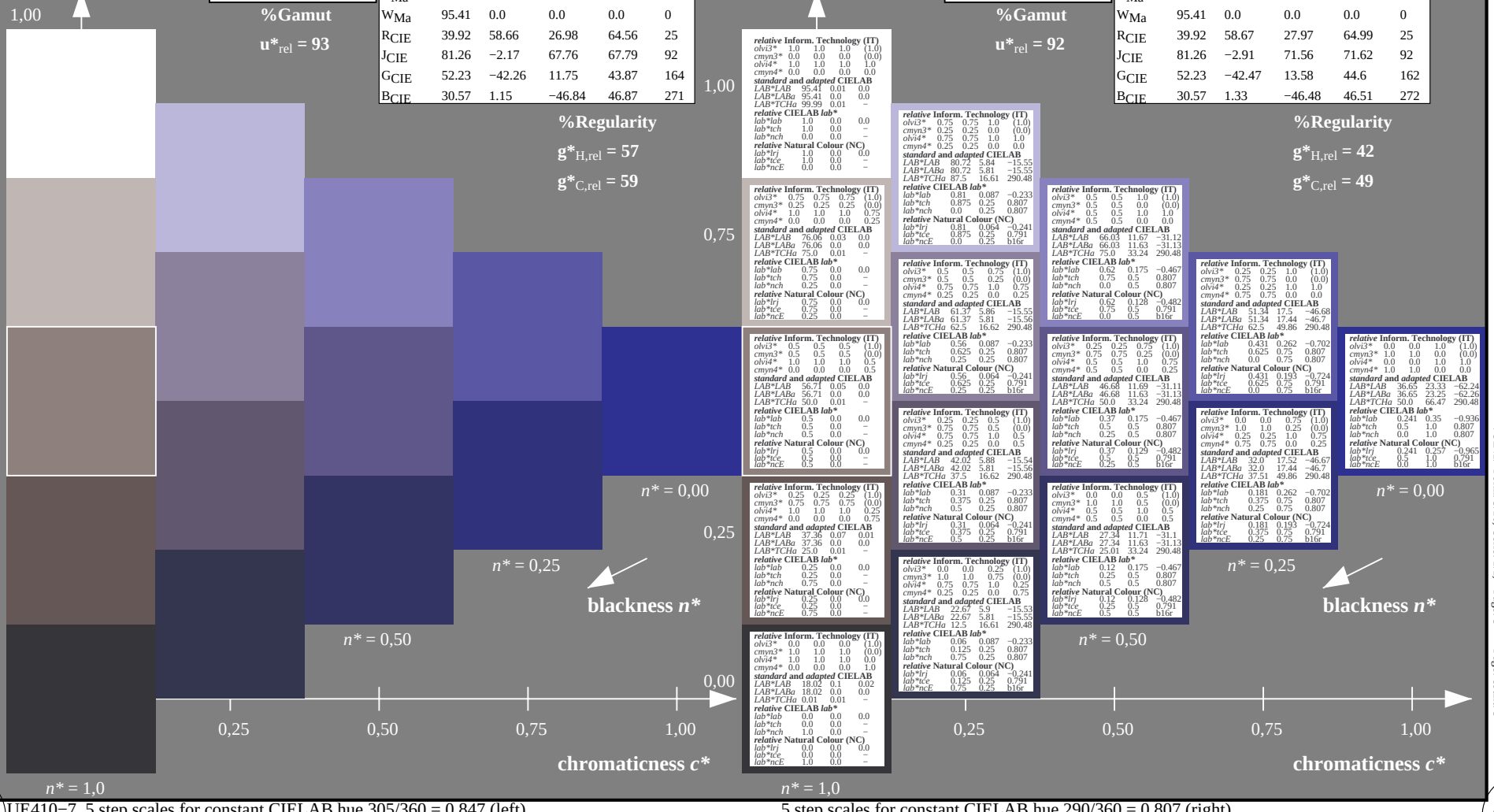


%Gamut
u*rel = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
g*H,rel = 42
g*C,rel = 49



UE410−7, 5 step scales for constant CIELAB hue 305/360 = 0.847 (left)

5 step scales for constant CIELAB hue 290/360 = 0.807 (right)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

BAM registration: 20060101-UE41/10Q/Q41E04NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 5/10, Serie: 1/1, Page: 5 Page: count: 5

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

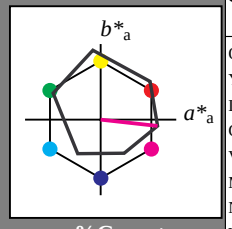
BAM registration: 20060101-UE41/10Q/Q41E05NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 6/10, Serie: 1/1, Page: 6 Page: count: 6

Input: Colorimetric 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
rgb*Ma: 1.0 0.0 1.0

triangle lightness

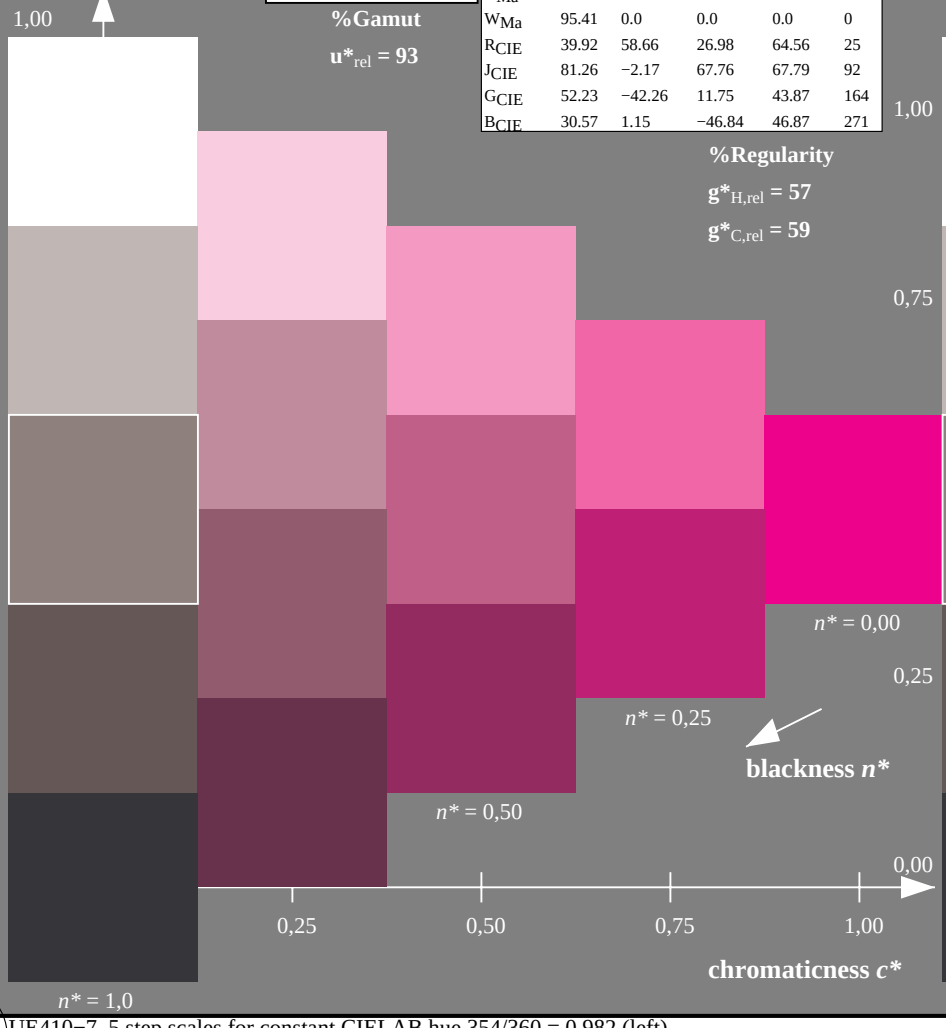


%Gamut
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

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

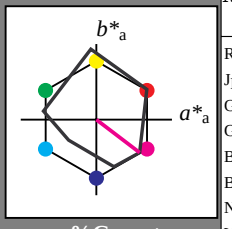


Output: Colorimetric Reflective System MRS18a

for hue *h* = lab*h = 323/360 = 0.896*
lab*tch* and *lab*nch

D65: hue B50R
LCH*Ma: 35 72 323
rgb*Ma: 1.0 0.0 1.0

triangle lightness

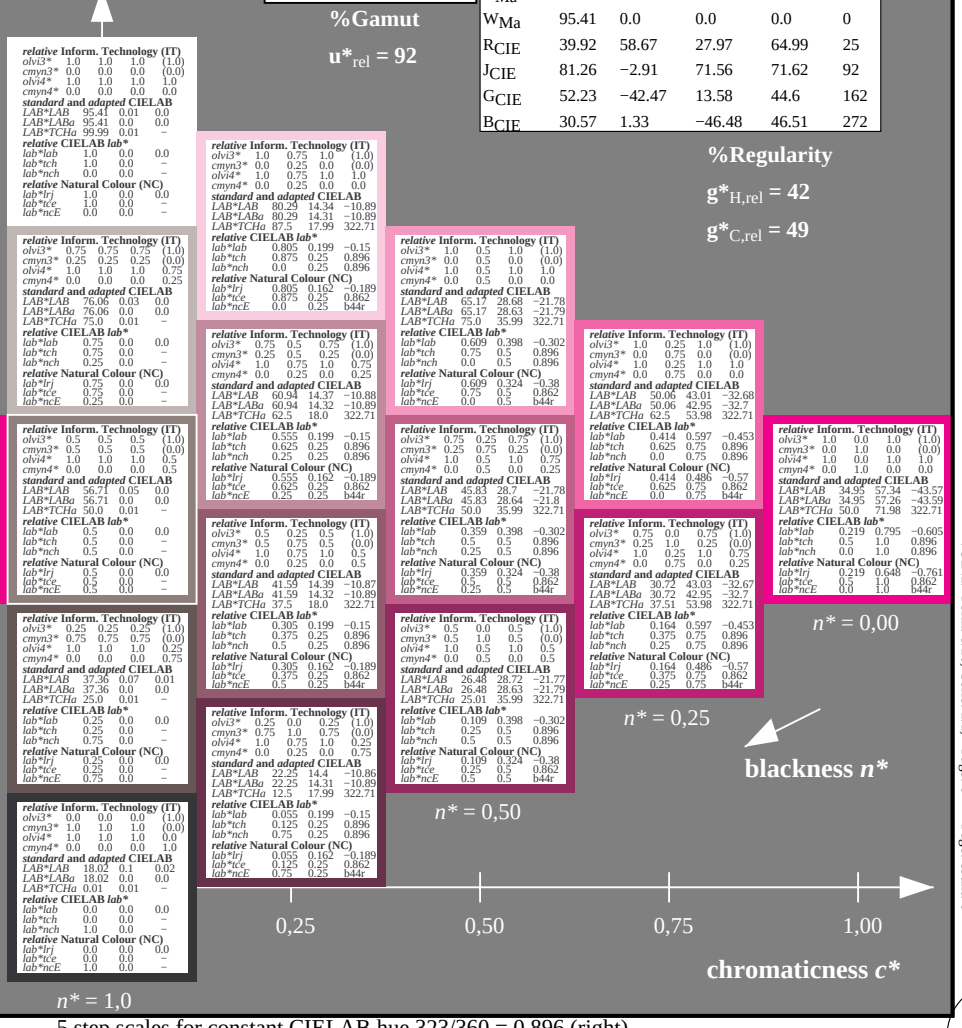


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



UE410−7, 5 step scales for constant CIELAB hue 354/360 = 0.982 (left)

5 step scales for constant CIELAB hue 323/360 = 0.896 (right)

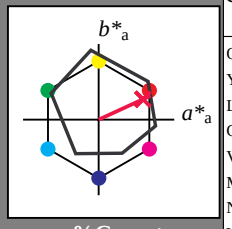
BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

Input: Colorimetric 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
rgb*Ma: 1.0 0.0 0.32

triangle lightness



%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	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

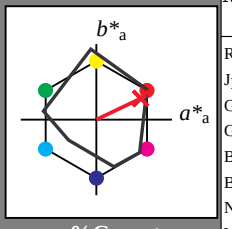
%Regularity
g*H,rel = 57
g*C,rel = 59

Output: Colorimetric Reflective System MRS18a

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

D65: hue R
LCH*Ma: 48 73 25
rgb*Ma: 1.0 0.0 0.1

triangle lightness

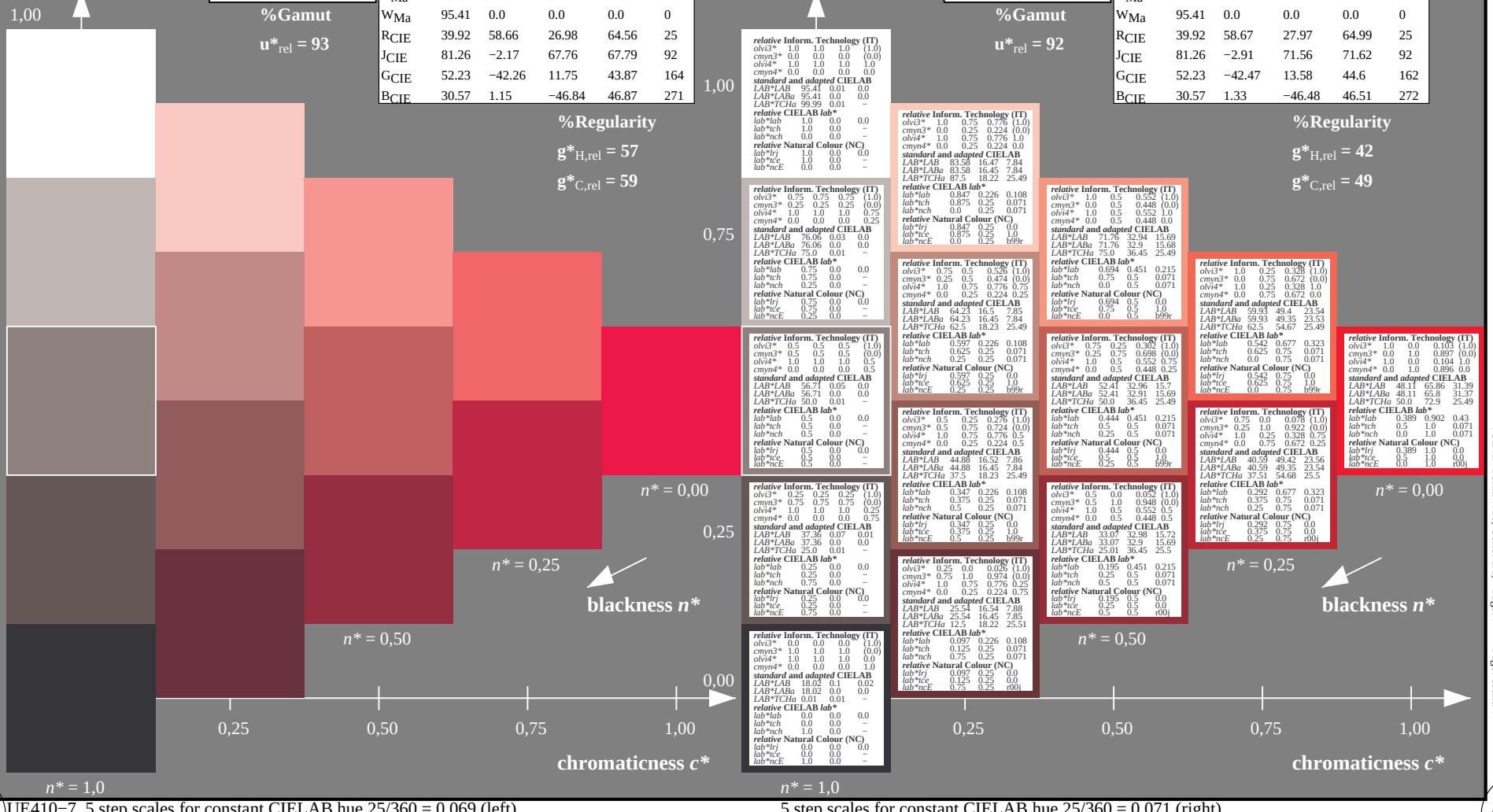


%Gamut
u*rel = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
g*H,rel = 42
g*C,rel = 49



UE410−7, 5 step scales for constant CIELAB hue 25/360 = 0.069 (left)

5 step scales for constant CIELAB hue 25/360 = 0.071 (right)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

BAM registration: 20060101-UE41/10Q/Q41E06NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 7/10, Serie: 1/1, Page: 7 Page: count: 7

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

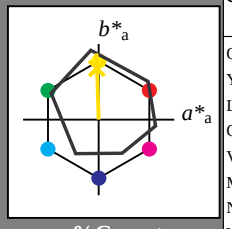
BAM registration: 20060101-UE41/10Q/Q41E07NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 8/10, Serie: 1/1, Page: 8 Page: count: 8

Input: Colorimetric 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
rgb*Ma: 1.0 0.9 0.0

triangle lightness



%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	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

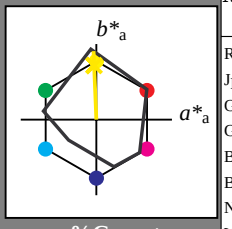
%Regularity
g*H,rel = 57
g*C,rel = 59

Output: Colorimetric Reflective System MRS18a

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

D65: hue J
LCH*Ma: 89 91 92
rgb*Ma: 1.0 0.95 0.0

triangle lightness

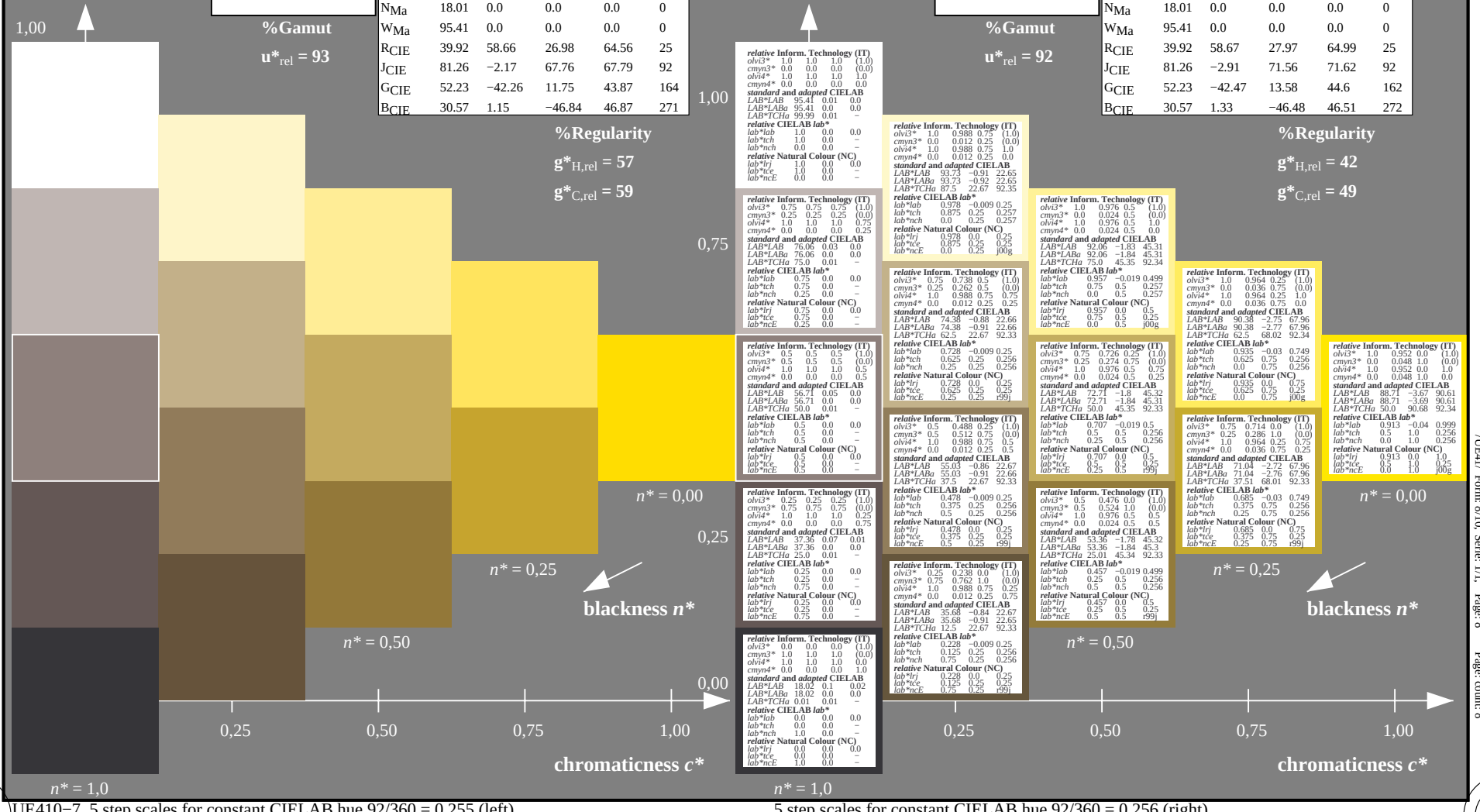


%Gamut
u*rel = 92

MRS18a; adapted (a) CIELAB data

	L*=L*a	a*a	b*a	C*ab,a	h*ab,a
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
g*H,rel = 42
g*C,rel = 49



UE410−7, 5 step scales for constant CIELAB hue 92/360 = 0.255 (left)

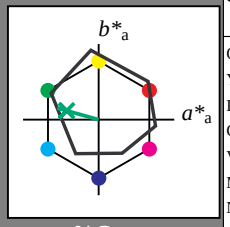
5 step scales for constant CIELAB hue 92/360 = 0.256 (right)

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*

Input: Colorimetric 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
rgb*Ma: 0.0 1.0 0.25

triangle lightness



%Gamut
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

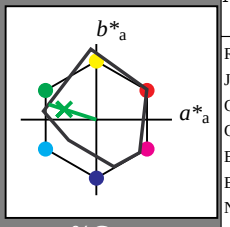
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	354
N_{Ma}	18.01	0.0	0.0	0.0	0
W_{Ma}	95.41	0.0	0.0	0.0	0
R_{CIE}	39.92	58.66	26.98	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

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

Output: Colorimetric Reflective System MRS18a
for hue *h* = lab*h = 162/360 = 0.451*
lab*tch* and *lab*nch

D65: hue G
LCH*Ma: 56 66 162
rgb*Ma: 0.11 1.0 0.0

triangle lightness

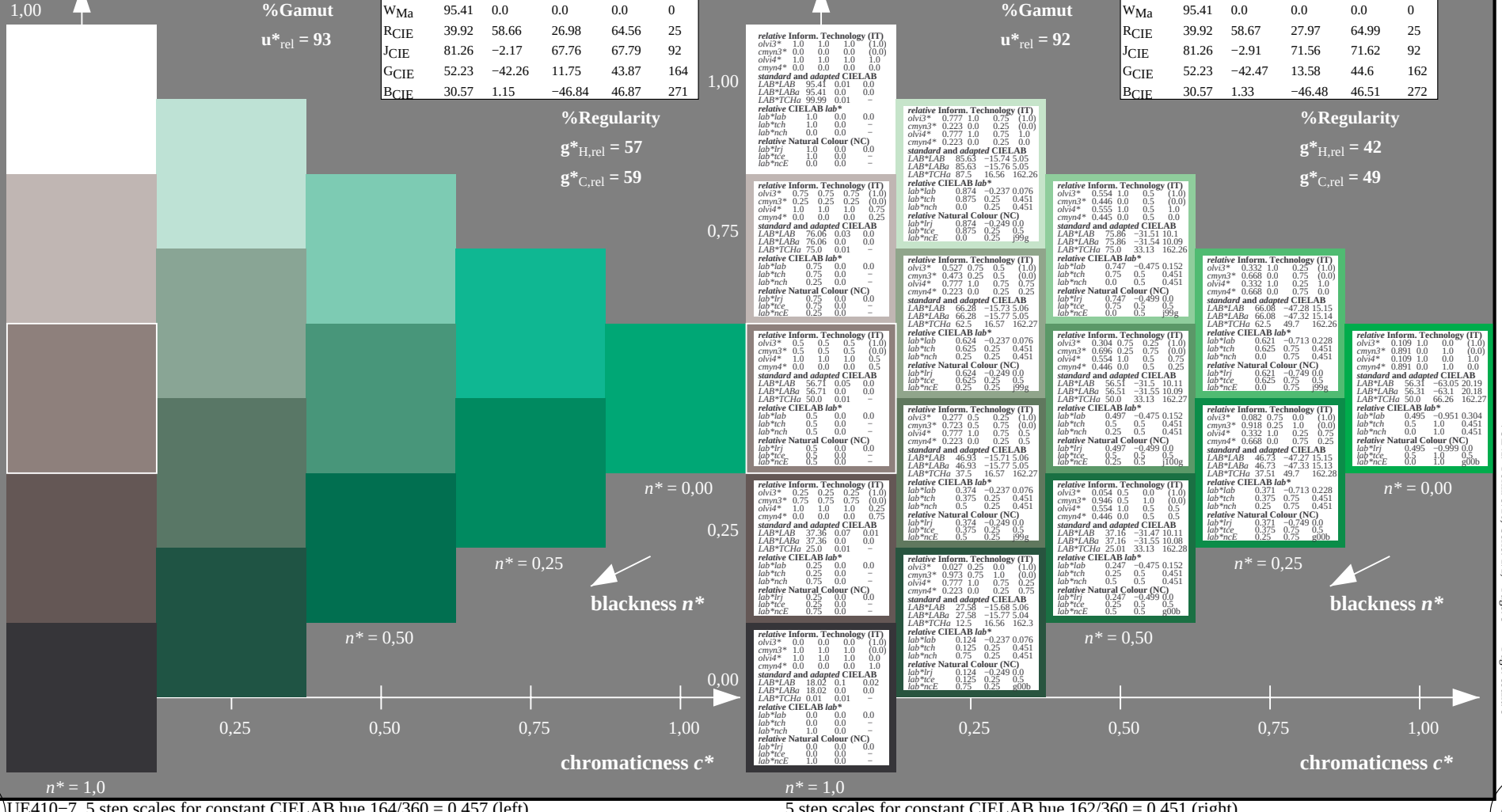


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



UE410−7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

5 step scales for constant CIELAB hue 162/360 = 0.451 (right)

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

BAM registration: 20060101-UE41/10Q/Q41E08NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 9/10, Serie: 1/1, Page: 9 Page: count: 9

See for similar files: http://www.ps.bam.de/UE41/
Technical information: http://www.ps.bam.de Version 2.1, io=0,0

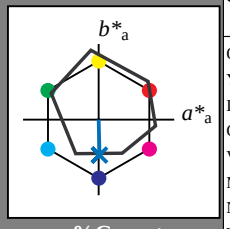
BAM registration: 20060101-UE41/10Q/Q41E09NP.PS/.PDF BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems
/UE41/ Form: 10/10,Serie: 1/1, Page: 10 Page: count: 10

Input: Colorimetric 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
rgb*Ma: 0.0 0.49 1.0

triangle lightness

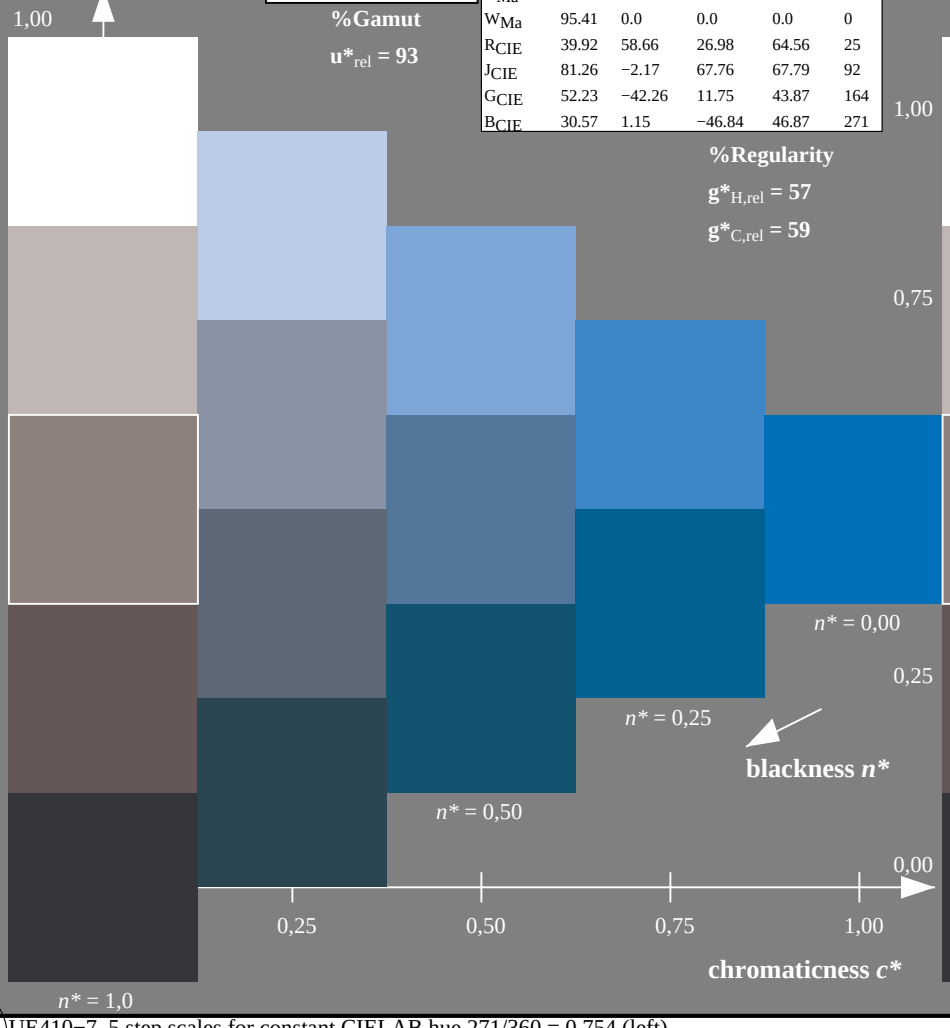


%Gamut
u^*_{rel} = 93

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O_{Ma}	47.94	65.37	50.52	82.62	38
Y_{Ma}	90.37	−10.27	91.77	92.34	96
L_{Ma}	50.9	−62.79	34.95	71.87	151
C_{Ma}	58.62	−30.35	−45.01	54.3	236
V_{Ma}	25.71	31.11	−44.42	54.24	305
M_{Ma}	48.13	75.27	−8.35	75.73	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	64.56	25
J_{CIE}	81.26	−2.17	67.76	67.79	92
G_{CIE}	52.23	−42.26	11.75	43.87	164
B_{CIE}	30.57	1.15	−46.84	46.87	271

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

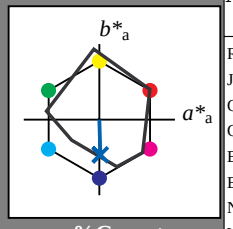


Output: Colorimetric Reflective System MRS18a

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

D65: hue B
LCH*Ma: 40 49 272
rgb*Ma: 0.0 0.36 1.0

triangle lightness

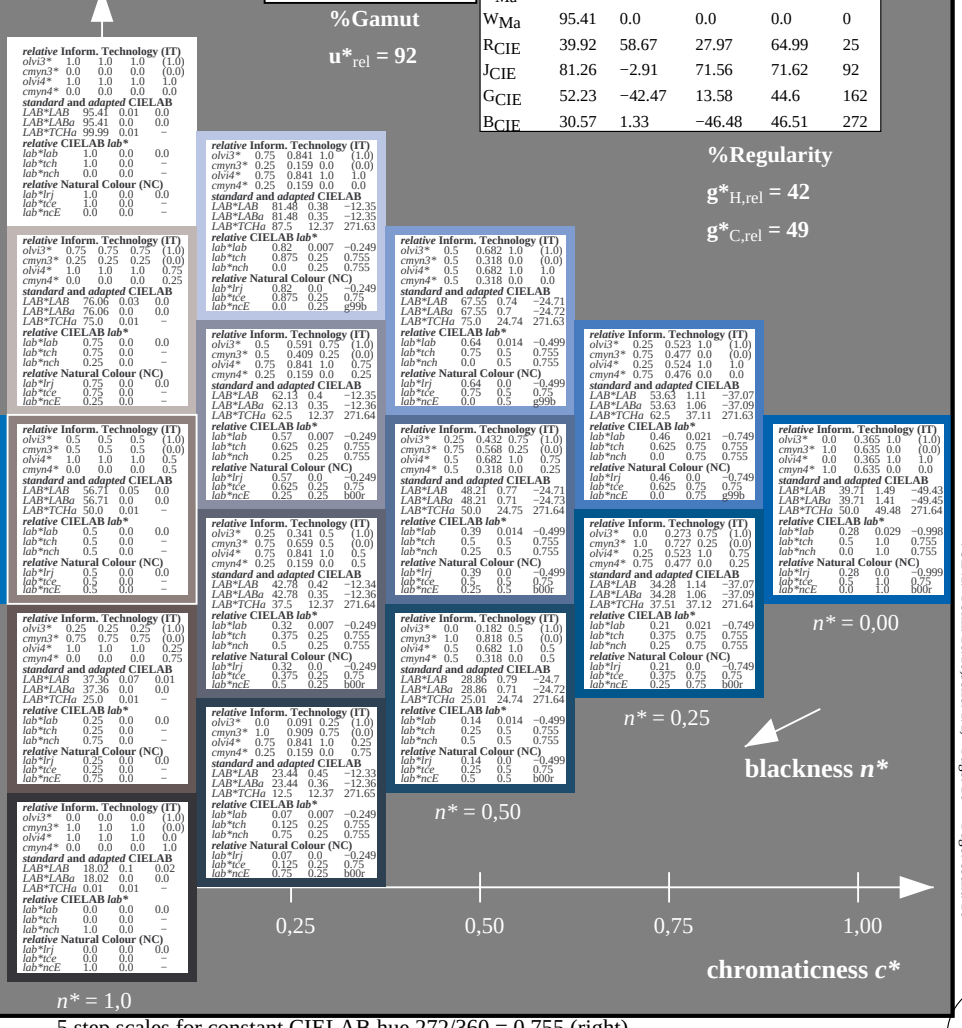


%Gamut
u^*_{rel} = 92

MRS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.8	40.02	77.87	31
J_{Ma}	90.7	−7.27	93.19	93.48	94
G_{Ma}	52.11	−69.93	11.26	70.85	171
$G50B_{Ma}$	45.03	−36.65	−27.13	45.61	217
B_{Ma}	36.65	23.26	−62.27	66.49	290
$B50R_{Ma}$	34.94	57.27	−43.6	71.99	323
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	58.67	27.97	64.99	25
J_{CIE}	81.26	−2.91	71.56	71.62	92
G_{CIE}	52.23	−42.47	13.58	44.6	162
B_{CIE}	30.57	1.33	−46.48	46.51	272

%Regularity
$g^*_{H,rel}$ = 42
$g^*_{C,rel}$ = 49



UE410−7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

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

BAM-test chart UE41; Colorimetric systems ORS18 & MRS18a input: *cmy0* setcmykcolor*
D65: 5 step colour scales and coordinate data for 10 hues output: *no change compared to input*