

Input: Colorimetric Television Luminous System TLS70

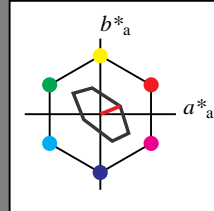
for hue  $h^* = lab^*h = 22/360 = 0.061$

LAB\*LCH, LAB\*NCH

D65: hue O

LCH\*Ma: 76 28 22

olv\*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

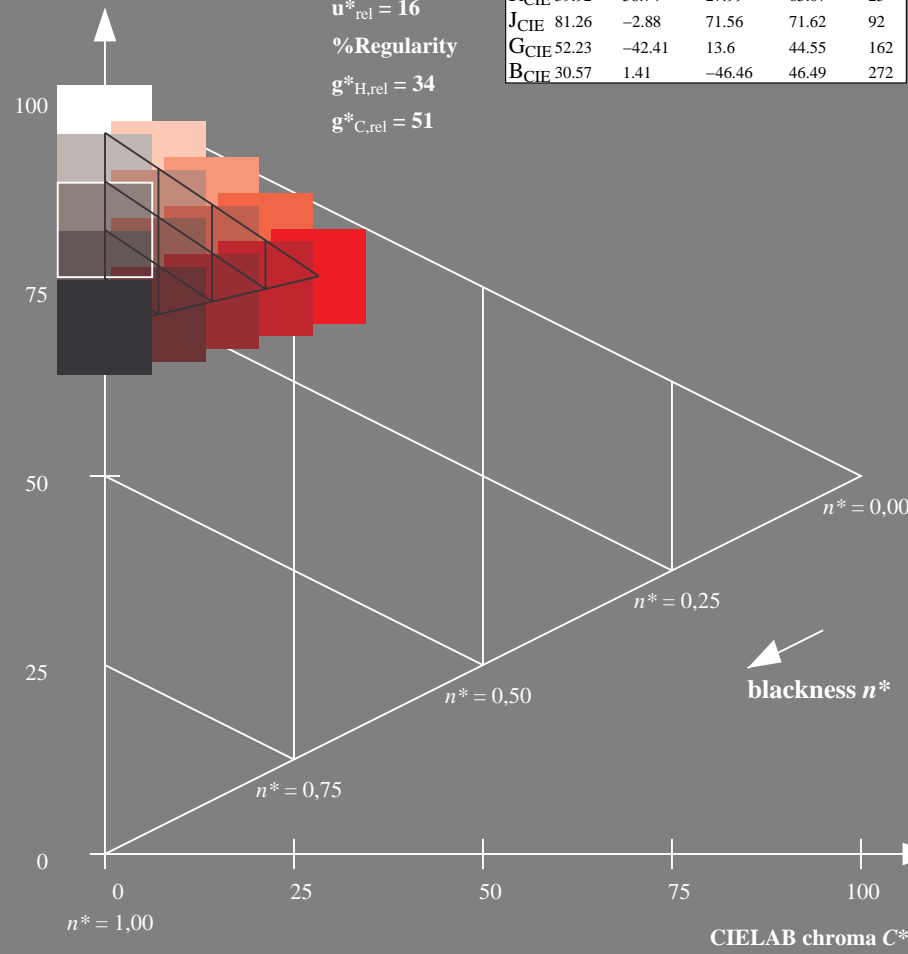
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 22/360 = 0.061 (left)

Output: Colorimetric Television Luminous System TLS70

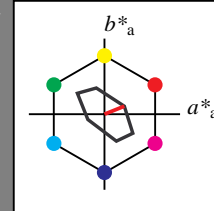
for hue  $h^* = lab^*h = 22/360 = 0.061$

LAB\*LCH, LAB\*NCH

D65: hue O

LCH\*Ma: 76 28 22

olv\*Ma: 1.0 0.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

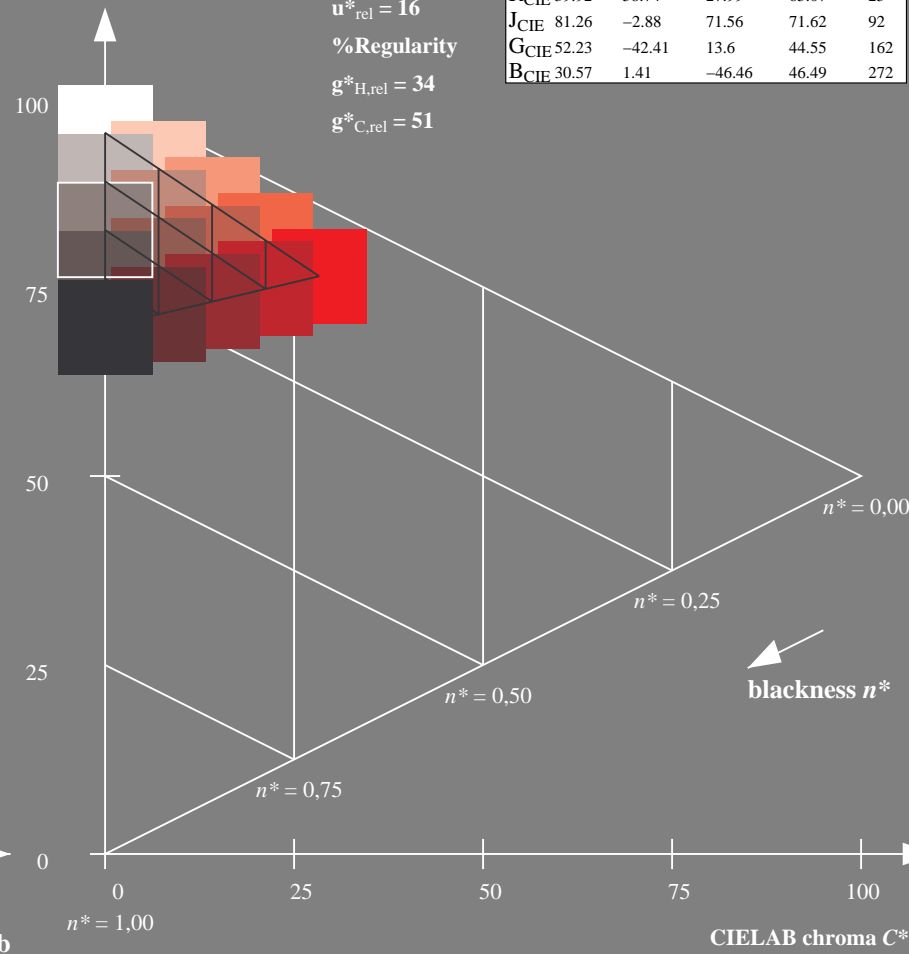
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 22/360 = 0.061 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: *cmY0\* setcmykcolor*

output: *Startup (S) data dependend*

Input: Colorimetric Television Luminous System TLS70

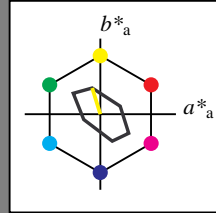
for hue  $h^* = lab^*h = 107/360 = 0.298$

LAB\*LCH, LAB\*NCH

D65: hue Y

LCH\*Ma: 94 36 107

olv\*Ma: 1.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

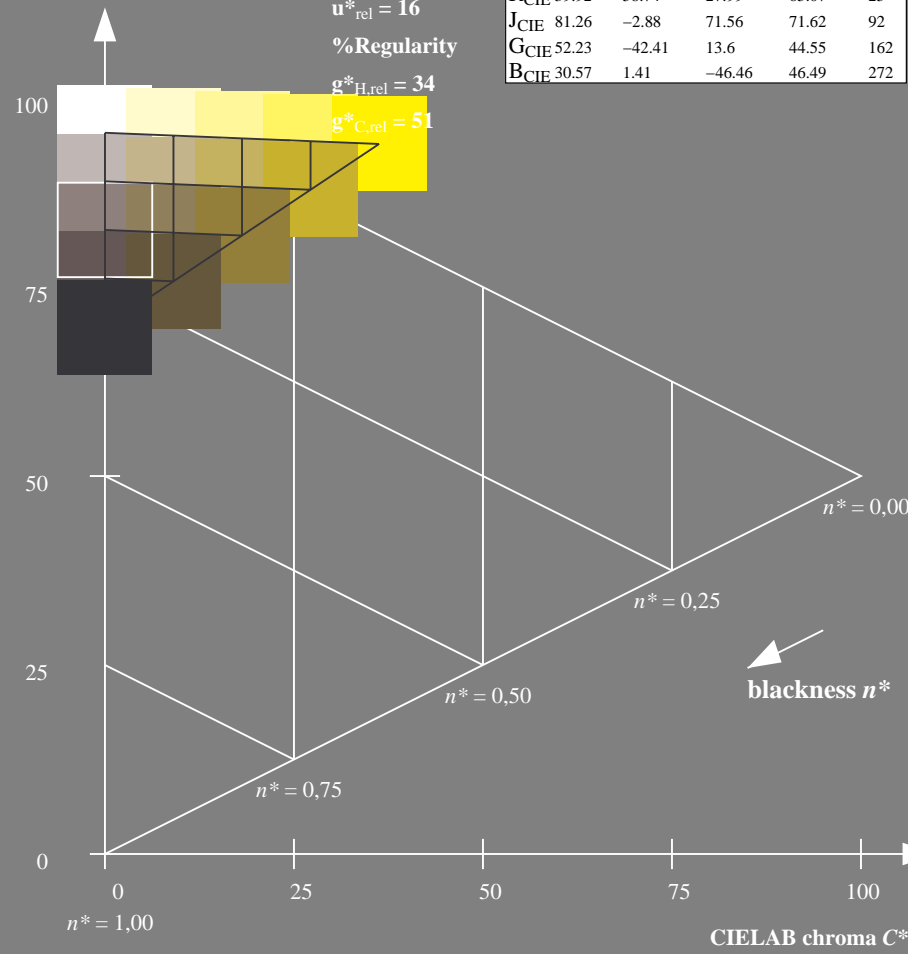
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 107/360 = 0.298 (left)

Output: Colorimetric Television Luminous System TLS70

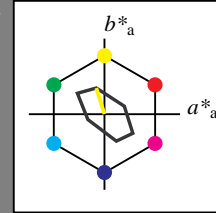
for hue  $h^* = lab^*h = 107/360 = 0.298$

LAB\*LCH, LAB\*NCH

D65: hue Y

LCH\*Ma: 94 36 107

olv\*Ma: 1.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^* = L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

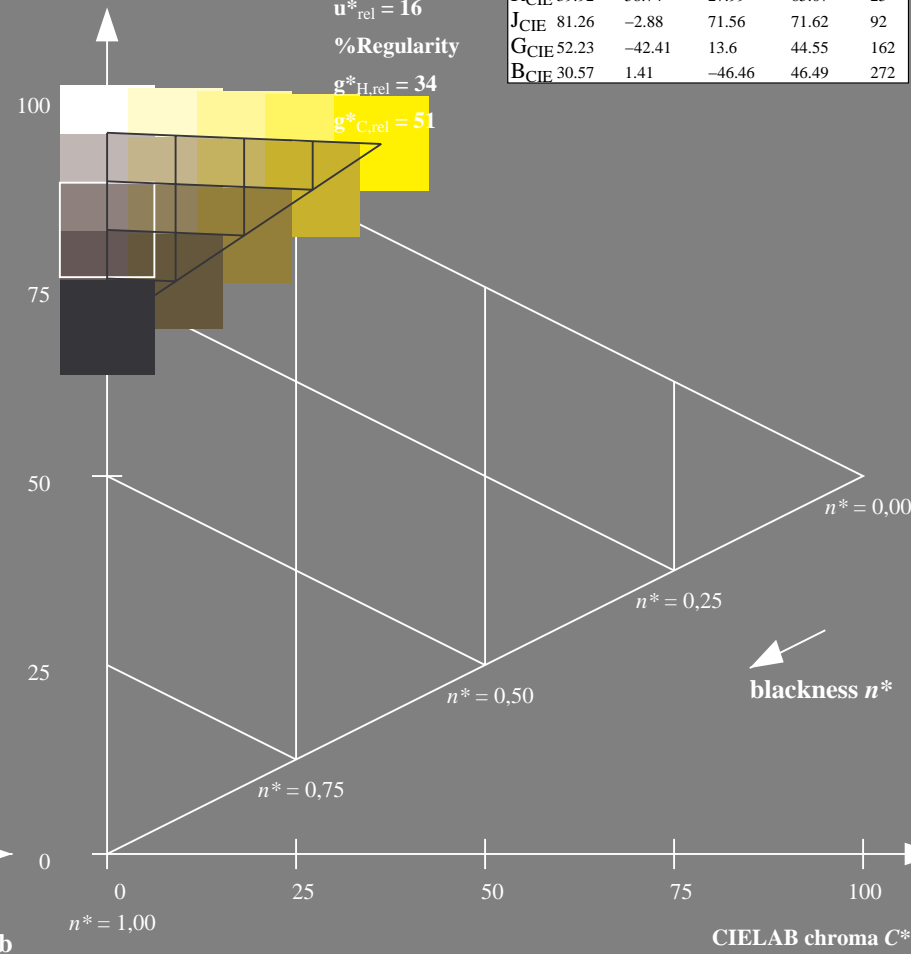
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



5 step scales for constant CIELAB hue 107/360 = 0.298 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: *cmY0\* setcmykcolor*

output: *Startup (S) data dependend*

Input: Colorimetric Television Luminous System TLS70

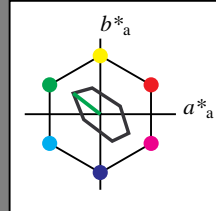
for hue  $h^* = lab^*h = 142/360 = 0.395$

LAB\*LCH, LAB\*NCH

D65: hue L

LCH\*Ma: 89 45 142

olv\*Ma: 0.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

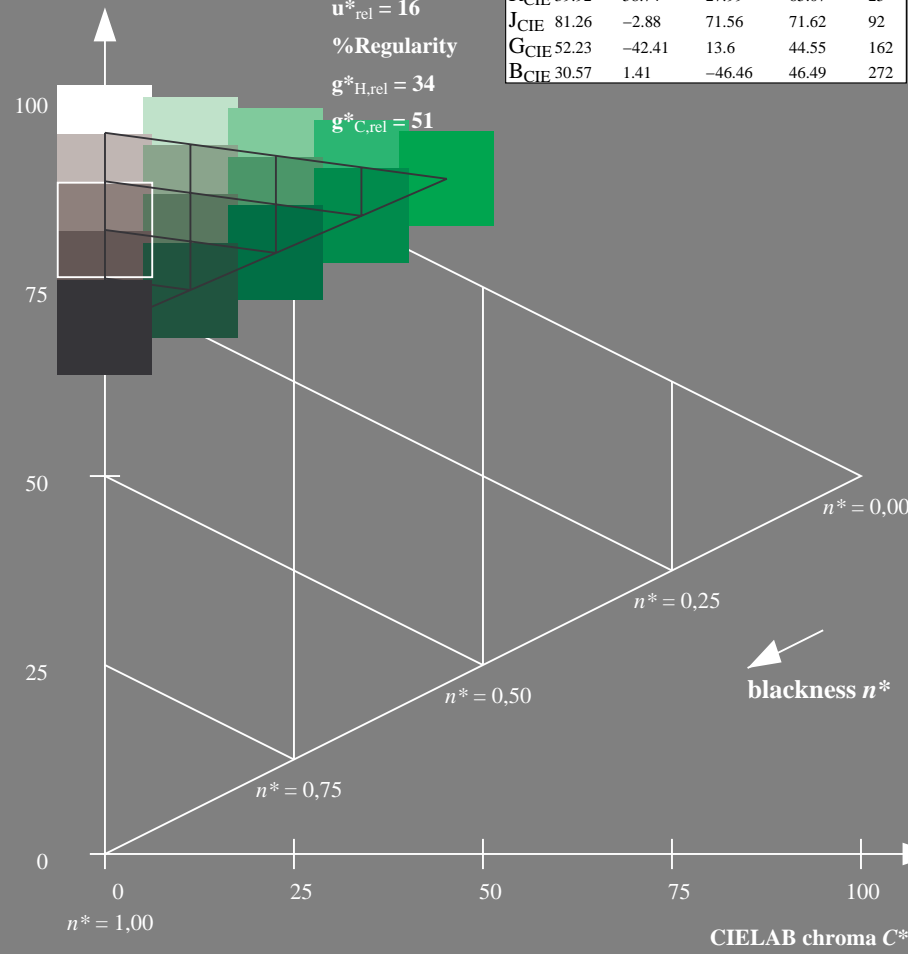
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

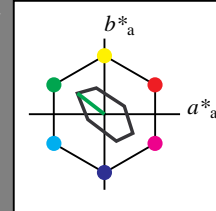
for hue  $h^* = lab^*h = 142/360 = 0.395$

LAB\*LCH, LAB\*NCH

D65: hue L

LCH\*Ma: 89 45 142

olv\*Ma: 0.0 1.0 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

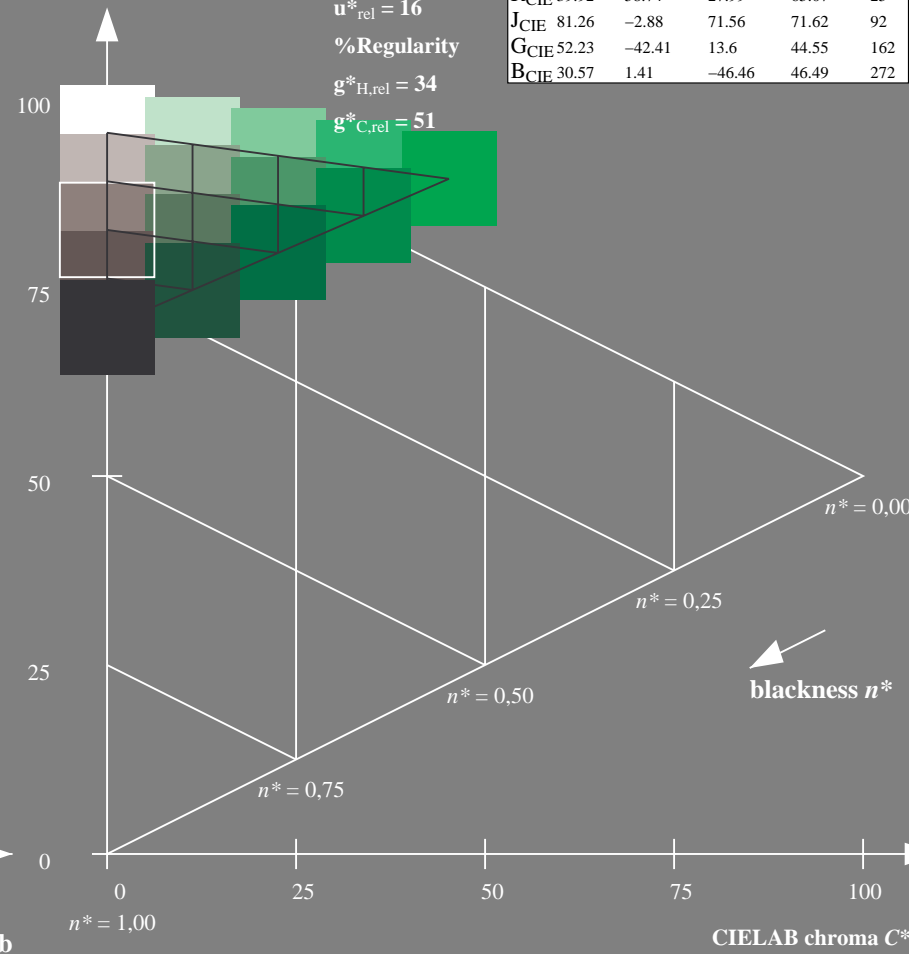
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 142/360 = 0.395 (left)

5 step scales for constant CIELAB hue 142/360 = 0.395 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmy0^*$  setcmykcolor

output: Startup (S) data dependend

See for similar files: <http://www.ps.bam.de/OE39/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0,0?

BAM registration: 20060101-OE39/10L/L39E02SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/OE39/ Form: 3/10, Serie: 1/1, Page: 3 Page count: 3

Input: Colorimetric Television Luminous System TLS70

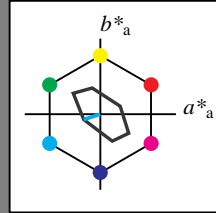
for hue  $h^* = lab^*h = 198/360 = 0.55$

LAB\*LCH, LAB\*NCH

D65: hue C

LCH\*Ma: 91 23 198

olv\*Ma: 0.0 1.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

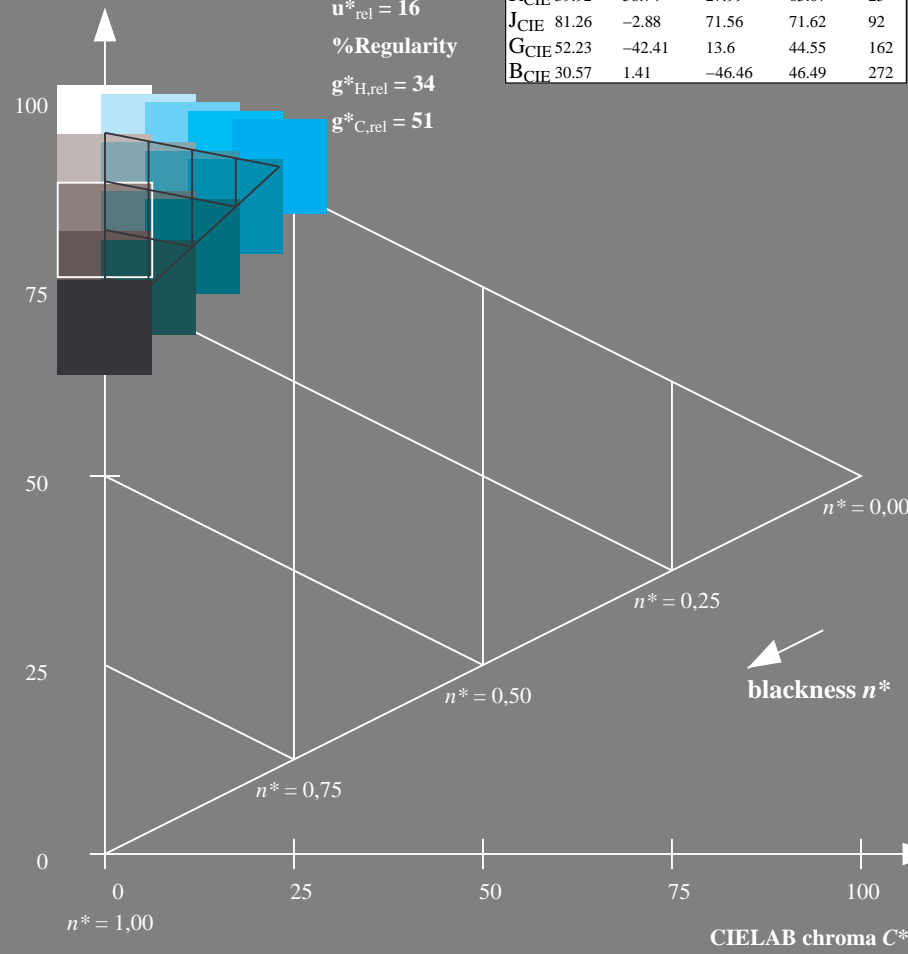
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

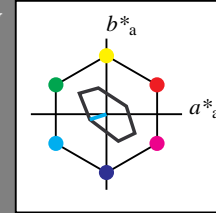
for hue  $h^* = lab^*h = 198/360 = 0.55$

LAB\*LCH, LAB\*NCH

D65: hue C

LCH\*Ma: 91 23 198

olv\*Ma: 0.0 1.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

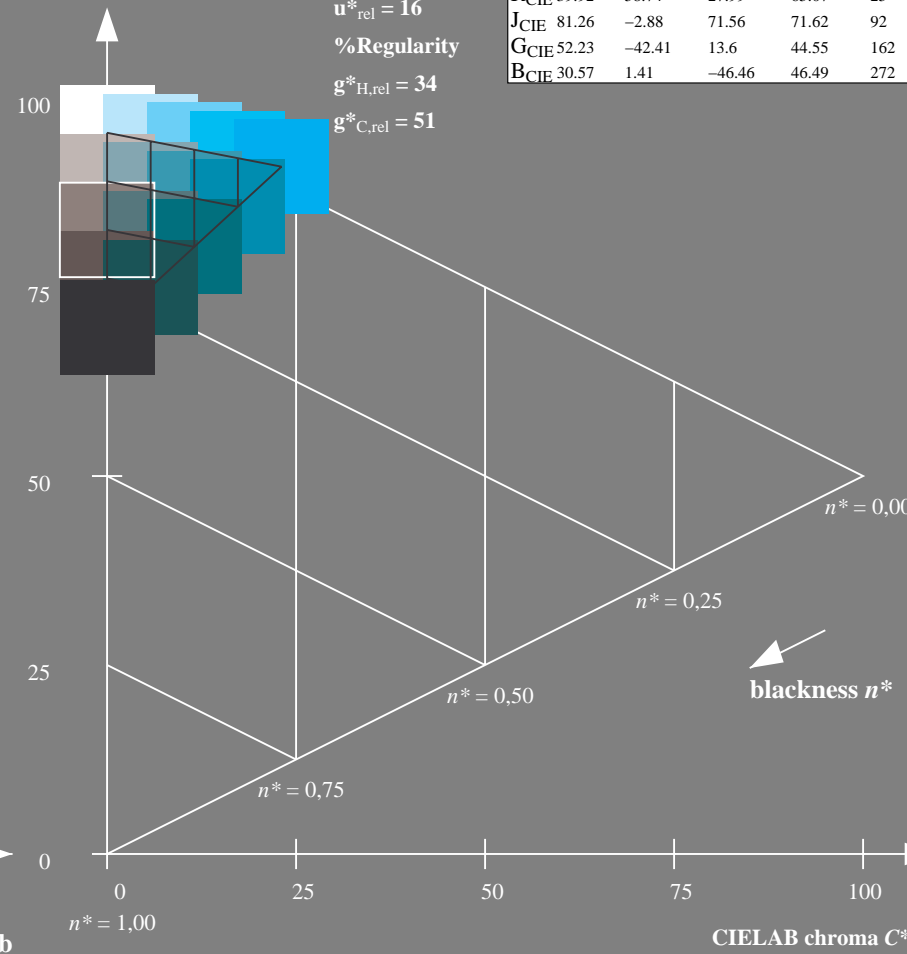
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 198/360 = 0.55 (left)

5 step scales for constant CIELAB hue 198/360 = 0.55 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*$  setcmkcolor

output: Startup (S) data dependend

See for similar files: <http://www.ps.bam.de/OE39/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0,0?

BAM registration: 20060101-OE39/10L/L39E03SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/OE39/ Form: 4/10, Serie: 1/1, Page: 4 Page count: 4

Input: Colorimetric Television Luminous System TLS70

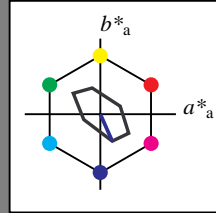
for hue  $h^* = lab^*h = 294/360 = 0.816$

LAB\*LCH, LAB\*NCH

D65: hue V

LCH\*Ma: 72 39 294

olv\*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

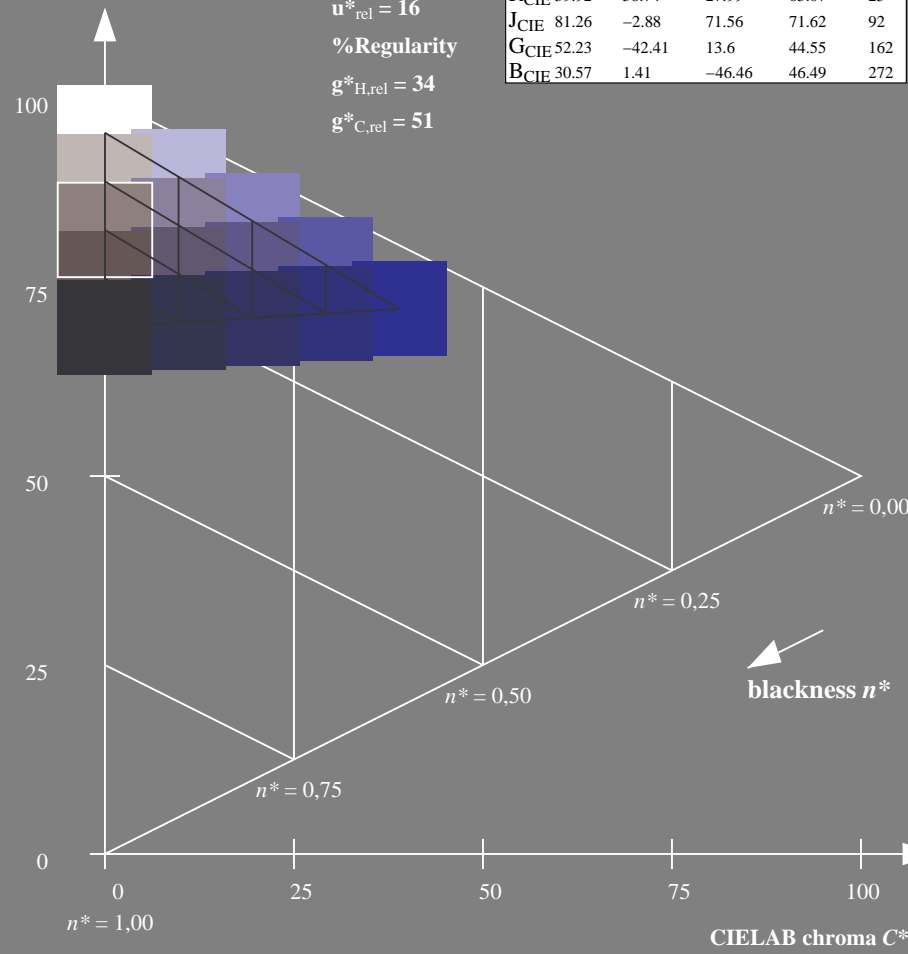
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

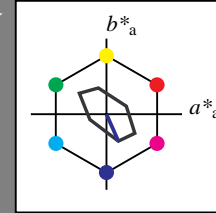
for hue  $h^* = lab^*h = 294/360 = 0.816$

LAB\*LCH, LAB\*NCH

D65: hue V

LCH\*Ma: 72 39 294

olv\*Ma: 0.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

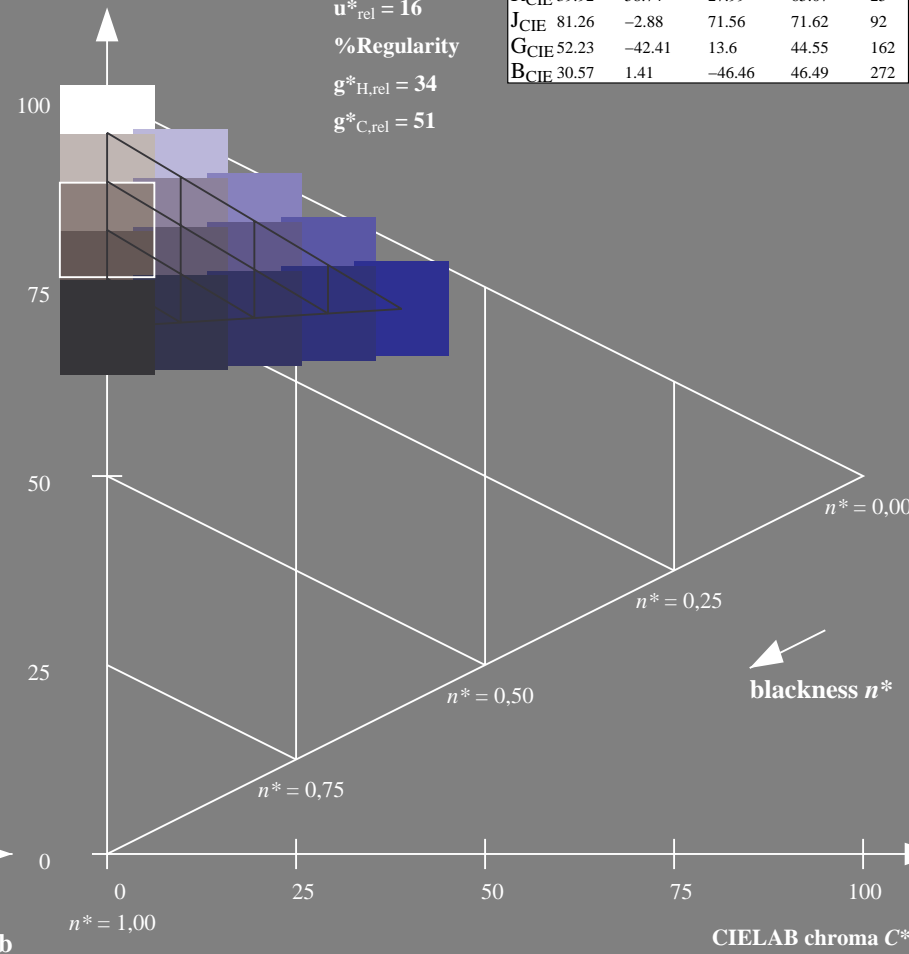
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 294/360 = 0.816 (left)

5 step scales for constant CIELAB hue 294/360 = 0.816 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmy0^*$  setcmykcolor

output: Startup (S) data dependend

Input: Colorimetric Television Luminous System TLS70

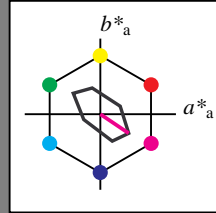
for hue  $h^* = lab^*h = 326/360 = 0.906$

LAB\*LCH, LAB\*NCH

D65: hue M

LCH\*Ma: 79 45 326

olv\*Ma: 1.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

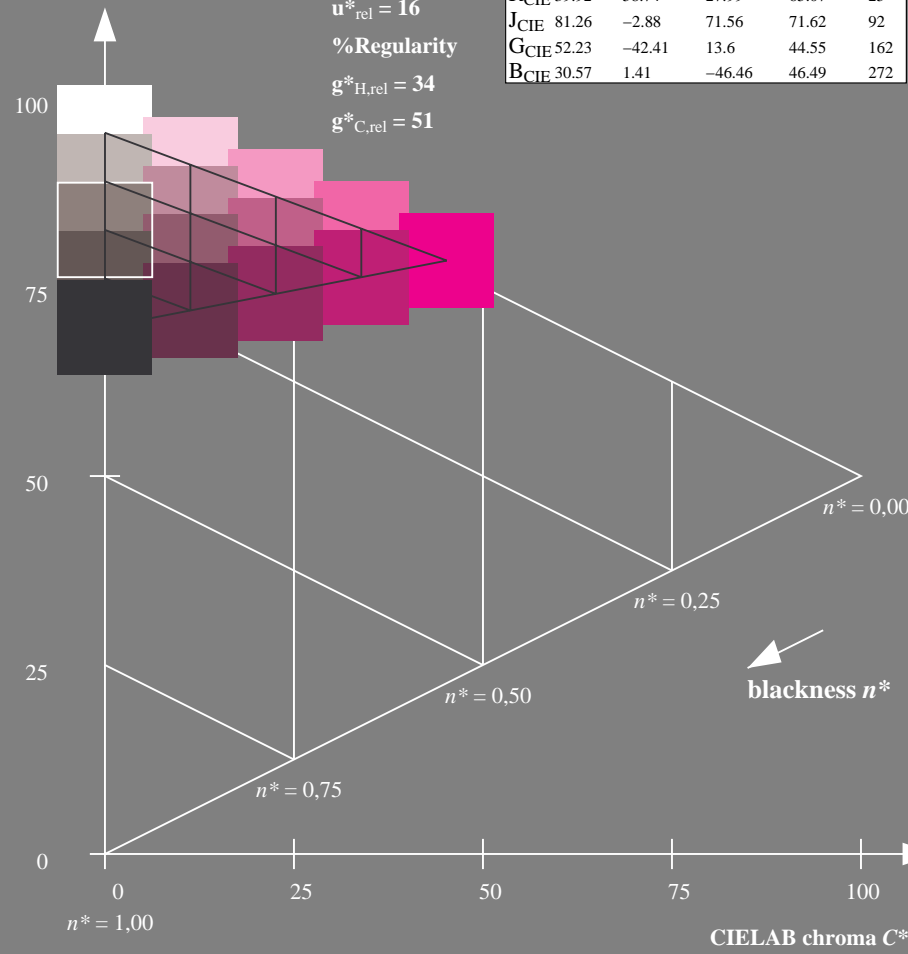
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

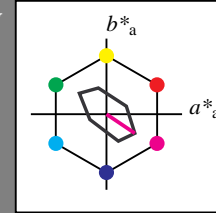
for hue  $h^* = lab^*h = 326/360 = 0.906$

LAB\*LCH, LAB\*NCH

D65: hue M

LCH\*Ma: 79 45 326

olv\*Ma: 1.0 0.0 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

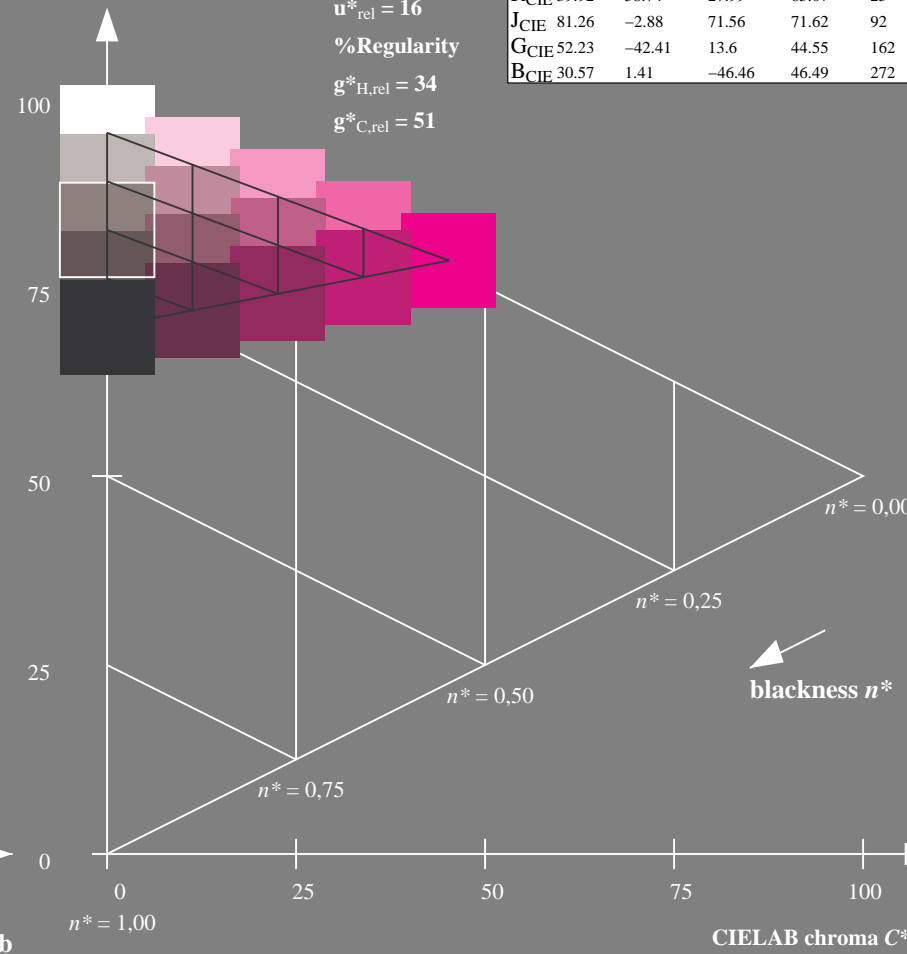
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 326/360 = 0.906 (left)

5 step scales for constant CIELAB hue 326/360 = 0.906 (right)

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmY0^*$  setcmkcolor

output: Startup (S) data dependend

See for similar files: <http://www.ps.bam.de/OE39/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0,0?

BAM registration: 20060101-OE39/10L/L39E05SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/OE39/ Form: 6/10, Serie: 1/1, Page: 6 Page count: 6

Input: Colorimetric Television Luminous System TLS70

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

LAB\*LCH, LAB\*NCH

D65: hue R

LCH\*Ma: 77 27 25

olv\*Ma: 1.0 0.05 0.0

CIELAB lightness  $L^*$

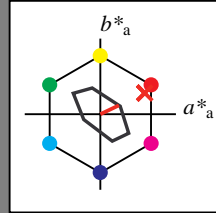
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

Output: Colorimetric Television Luminous System TLS70

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

LAB\*LCH, LAB\*NCH

D65: hue R

LCH\*Ma: 77 27 25

olv\*Ma: 1.0 0.05 0.0

CIELAB lightness  $L^*$

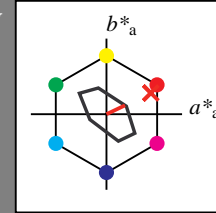
%Gamut

$u^*_{rel} = 16$

%Regularity

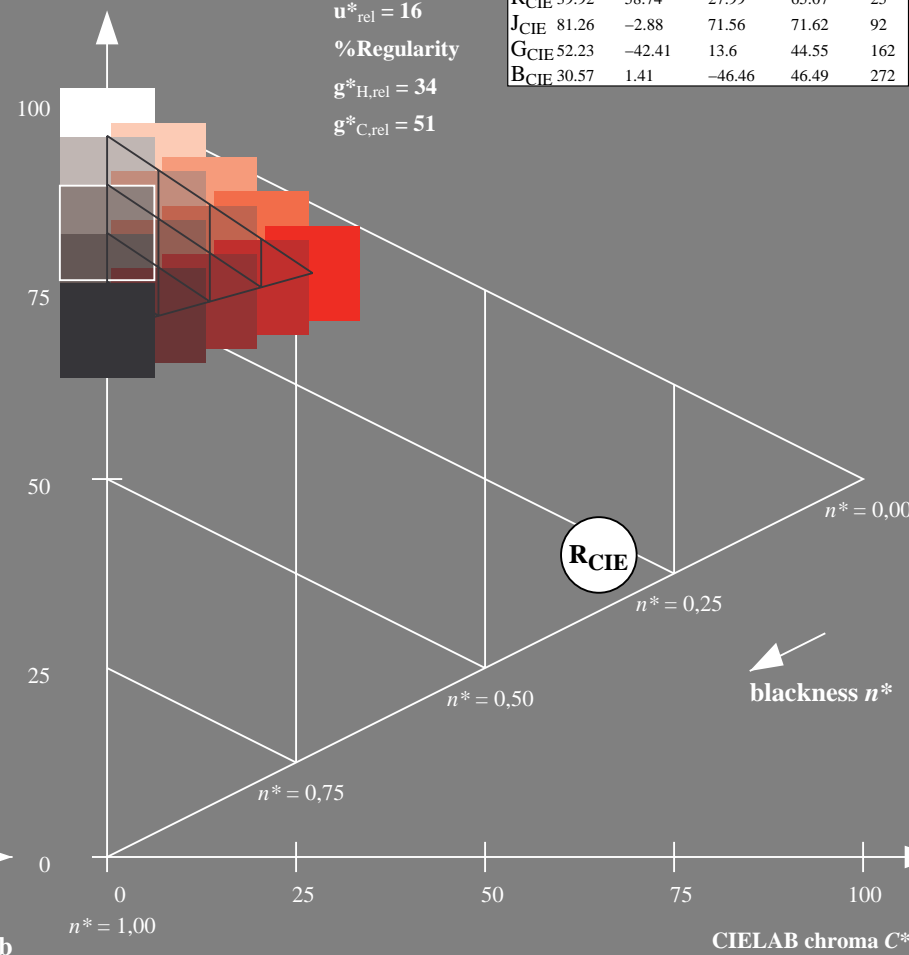
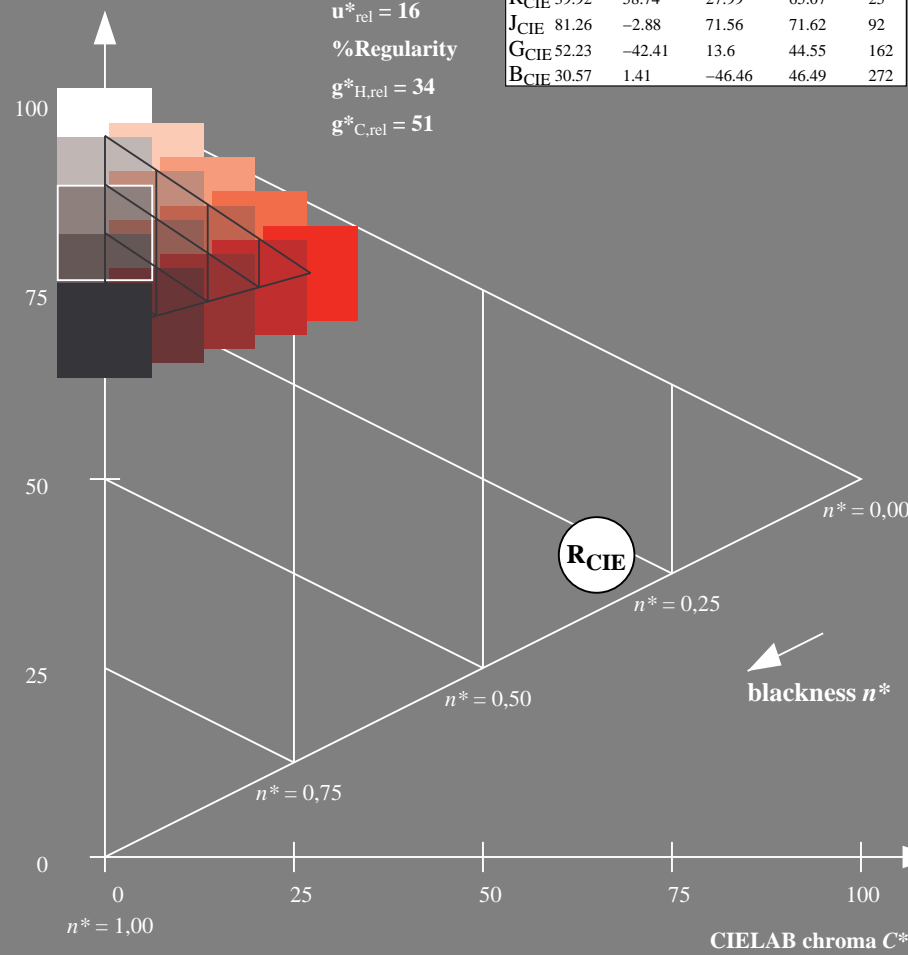
$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272



OE390-7, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

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

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: *cmY0\* setcmykcolor*

output: *Startup (S) data dependend*

Input: Colorimetric Television Luminous System TLS70

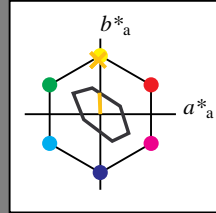
for hue  $h^* = lab^*h = 92/360 = 0.256$

LAB\*LCH, LAB\*NCH

D65: hue J

LCH\*Ma: 89 28 92

olv\*Ma: 1.0 0.74 0.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

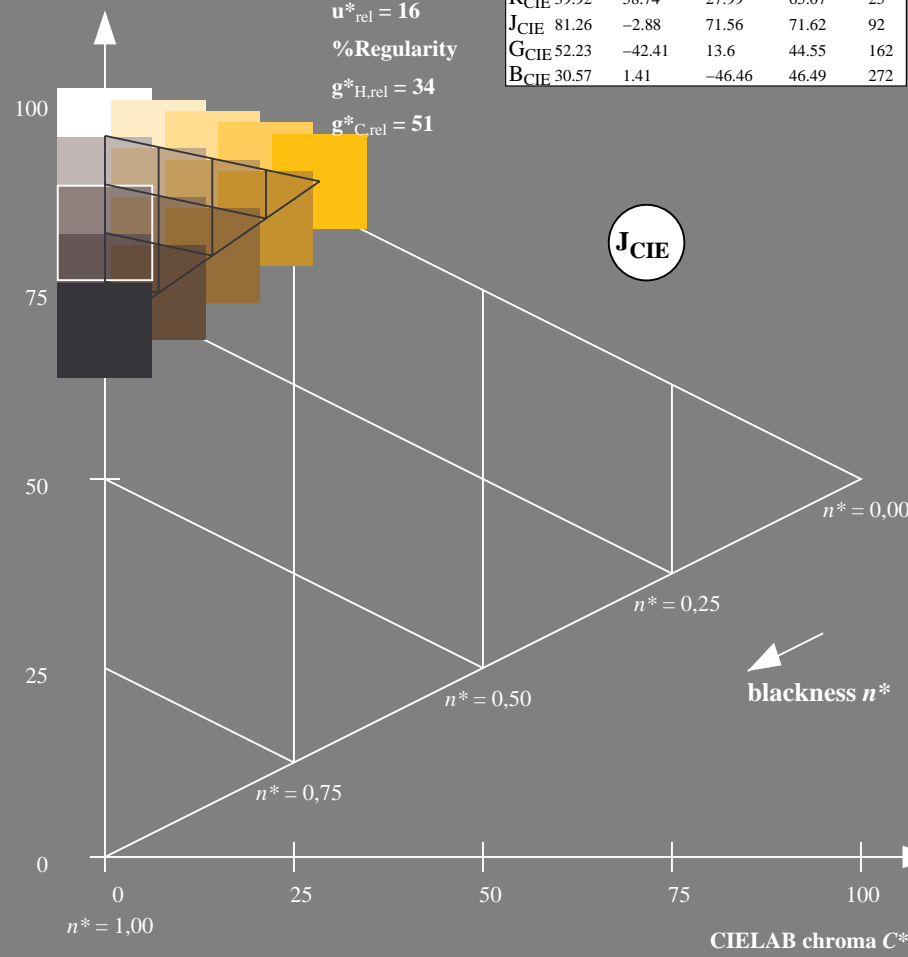
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Television Luminous System TLS70

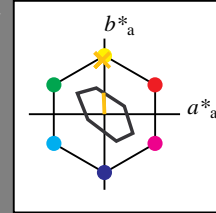
for hue  $h^* = lab^*h = 92/360 = 0.256$

LAB\*LCH, LAB\*NCH

D65: hue J

LCH\*Ma: 89 28 92

olv\*Ma: 1.0 0.74 0.0



CIELAB lightness  $L^*$

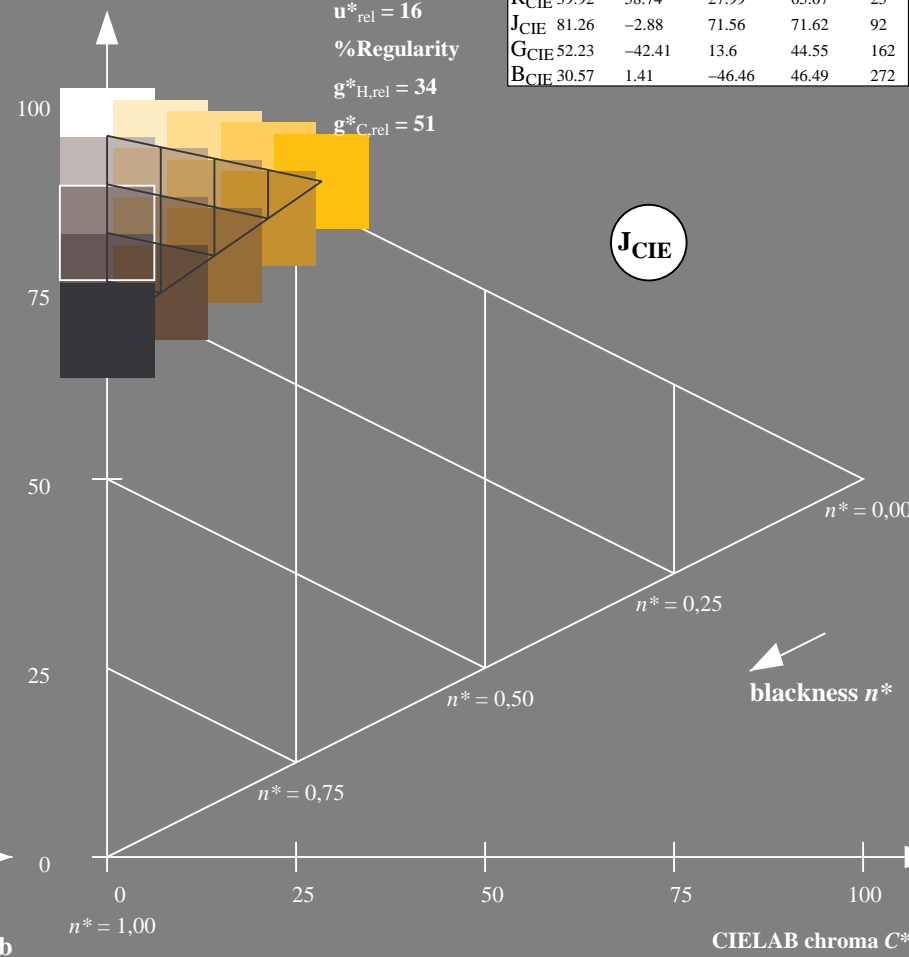
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



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

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: *cmY0\* setcmykcolor*

output: *Startup (S) data dependend*



Input: Colorimetric Television Luminous System TLS70

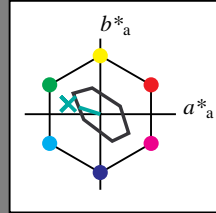
for hue  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D65: hue G

LCH\*Ma: 90 30 162

olv\*Ma: 0.0 1.0 0.53



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

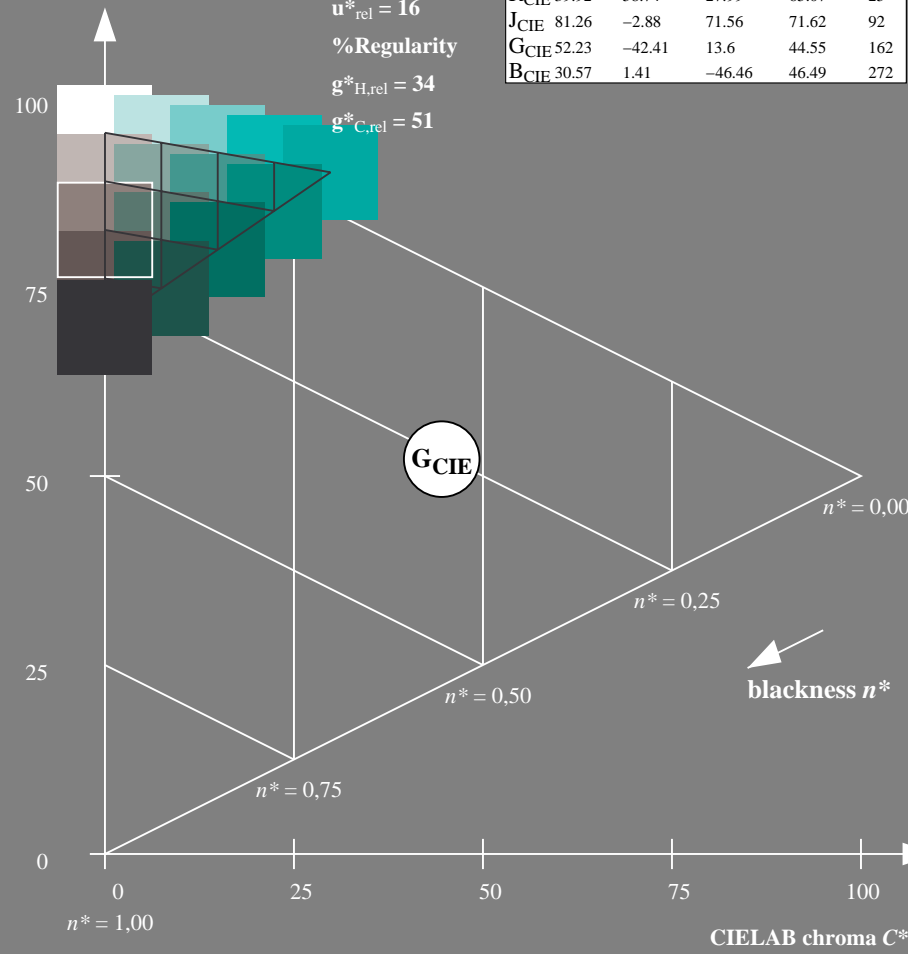
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

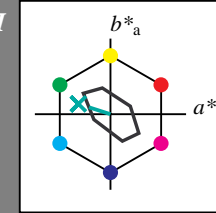
for hue  $h^* = lab^*h = 162/360 = 0.451$

LAB\*LCH, LAB\*NCH

D65: hue G

LCH\*Ma: 90 30 162

olv\*Ma: 0.0 1.0 0.53



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

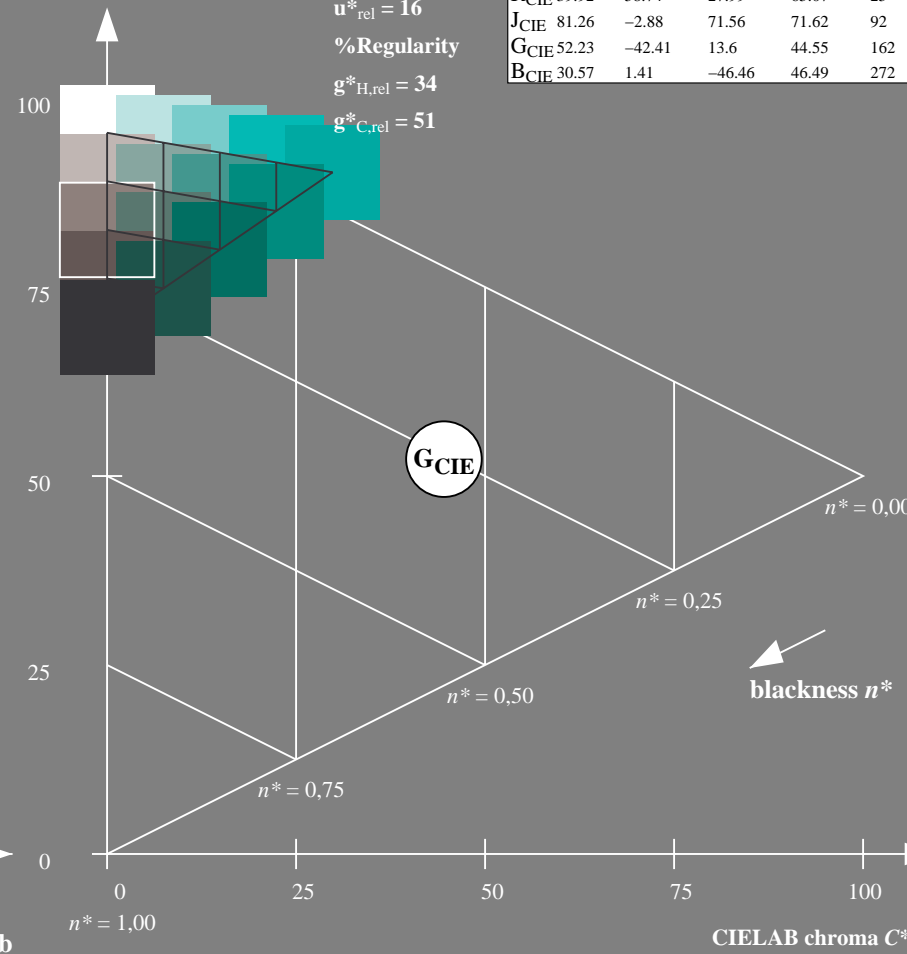
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

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

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input:  $cmy0^*$  setcmykcolor

output: Startup (S) data dependend

See for similar files: <http://www.ps.bam.de/OE39/>  
Technical information: <http://www.ps.bam.de>  
Version 2.1, io=0,0?

BAM registration: 20060101-OE39/10L/L39E08SP.PS/.PDF BAM material: code=rh4ta  
application for evaluation and measurement of printer or monitor systems  
/OE39/ Form: 9/10, Serie: 1/1, Page: 9 Page count: 9

Input: Colorimetric Television Luminous System TLS70

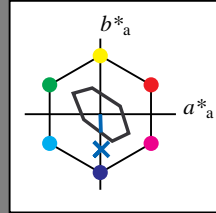
for hue  $h^* = lab^*h = 272/360 = 0.755$

LAB\*LCH, LAB\*NCH

D65: hue B

LCH\*Ma: 80 24 272

olv\*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

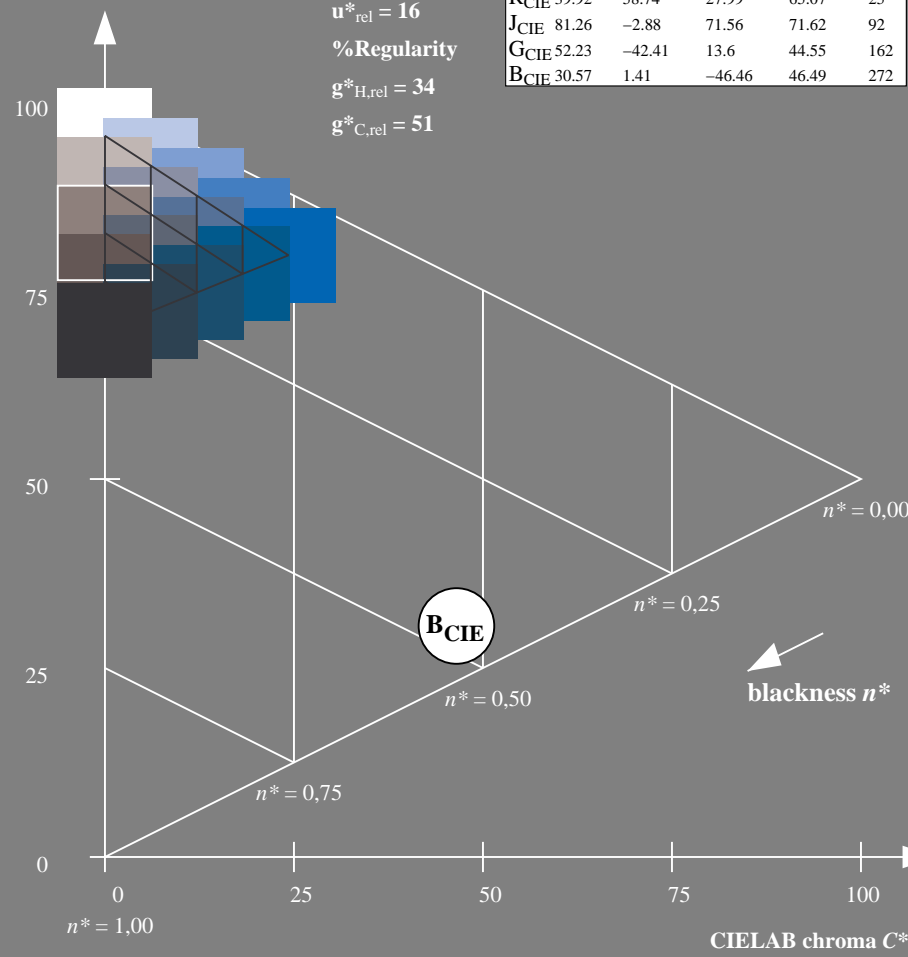
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



Output: Colorimetric Television Luminous System TLS70

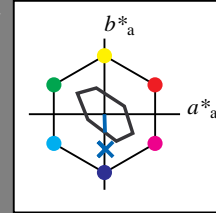
for hue  $h^* = lab^*h = 272/360 = 0.755$

LAB\*LCH, LAB\*NCH

D65: hue B

LCH\*Ma: 80 24 272

olv\*Ma: 0.0 0.4 1.0



TLS70; adapted (a) CIELAB data

	$L^*=L^*_a$	$a^*_a$	$b^*_a$	$C^*_{ab,a}$	$h^*_{ab,a}$
O <sub>Ma</sub>	76.43	26.27	10.57	28.32	22
Y <sub>Ma</sub>	93.93	-10.76	34.63	36.27	107
L <sub>Ma</sub>	89.32	-35.8	27.64	45.24	142
C <sub>Ma</sub>	90.93	-21.95	-7.07	23.07	198
V <sub>Ma</sub>	72.1	15.76	-35.63	38.97	294
M <sub>Ma</sub>	78.5	37.52	-25.23	45.22	326
N <sub>Ma</sub>	69.7	0.0	0.0	0.0	0
W <sub>Ma</sub>	95.41	0.0	0.0	0.0	0
R <sub>CIE</sub>	39.92	58.74	27.99	65.07	25
J <sub>CIE</sub>	81.26	-2.88	71.56	71.62	92
G <sub>CIE</sub>	52.23	-42.41	13.6	44.55	162
B <sub>CIE</sub>	30.57	1.41	-46.46	46.49	272

CIELAB lightness  $L^*$

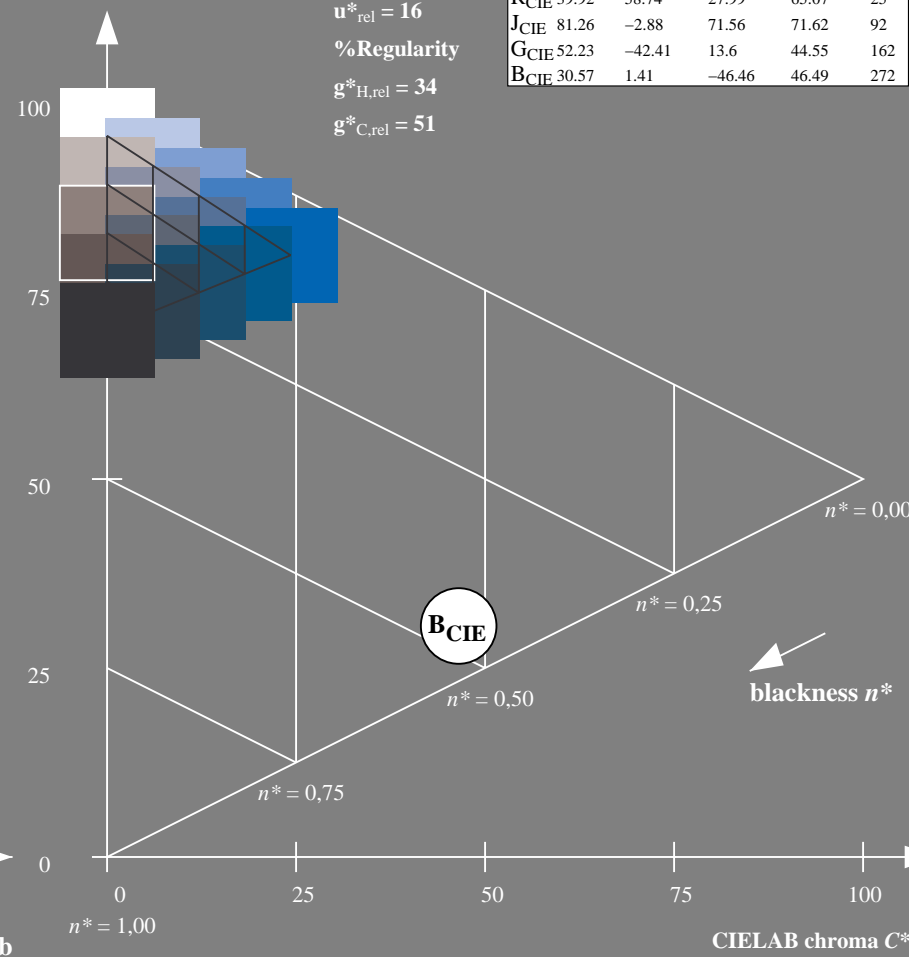
%Gamut

$u^*_{rel} = 16$

%Regularity

$g^*_{H,rel} = 34$

$g^*_{C,rel} = 51$



OE390-7, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

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

BAM-test chart OE39; Colorimetric systems ORS18 & ORS18

D65: Coordinate systems of 5 step colour scales for 10 hues

input: *cmY0\* setcmykcolor*

output: *Startup (S) data depend*