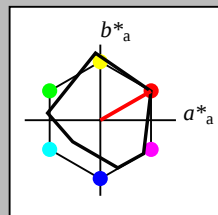


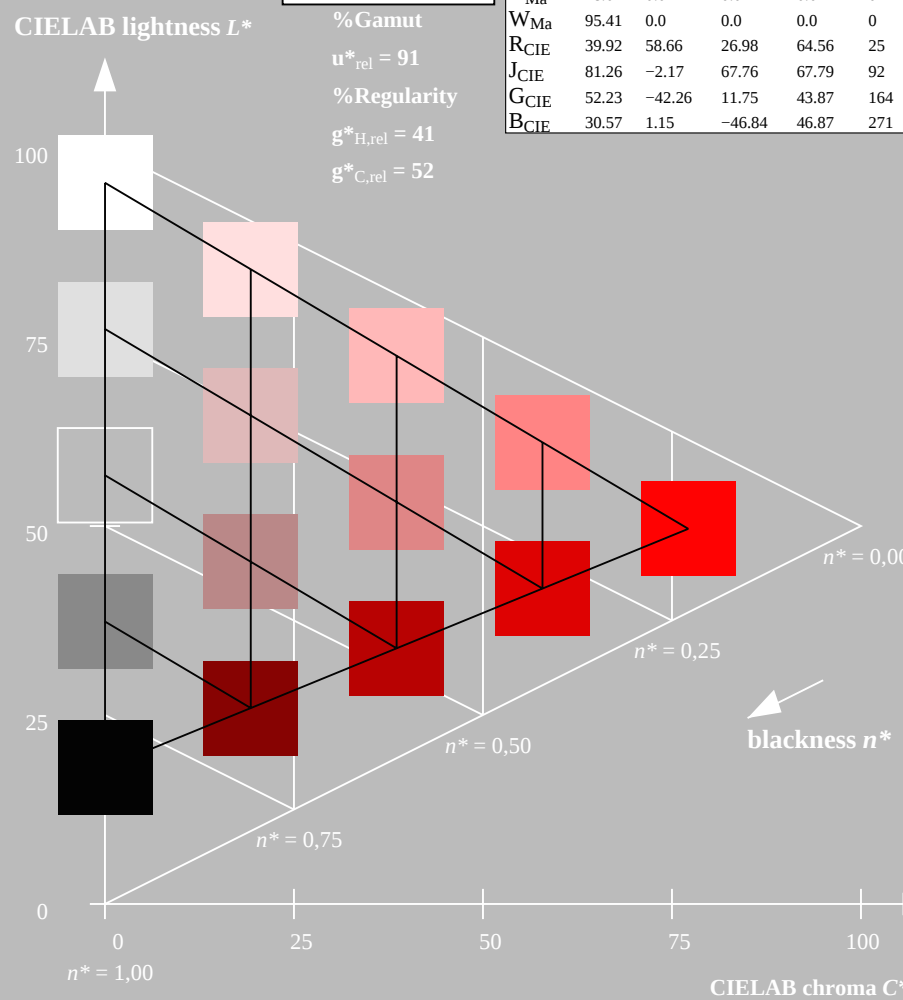


Input: Colorimetric Reflective System MRS18
for hue $h^* = lab \cdot h = 30/360 = 0.083$
 $LAB \cdot LCH, LAB \cdot NCH$

D65: hue R
 $LCH \cdot Ma: 50 \ 77 \ 30$
 $olv \cdot Ma: 1.0 \ 0.0 \ 0.0$



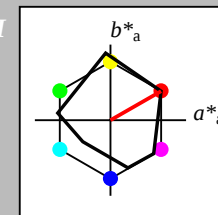
MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.96	38.37	77.18	30
J_{Ma}	90.7	-6.36	88.75	88.98	94
G_{Ma}	52.11	-69.73	9.44	70.37	172
$G50B_{Ma}$	45.03	-36.57	-28.47	46.36	218
B_{Ma}	36.65	23.19	-63.05	67.18	290
$B50R_{Ma}$	34.94	57.17	-44.26	72.31	322
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



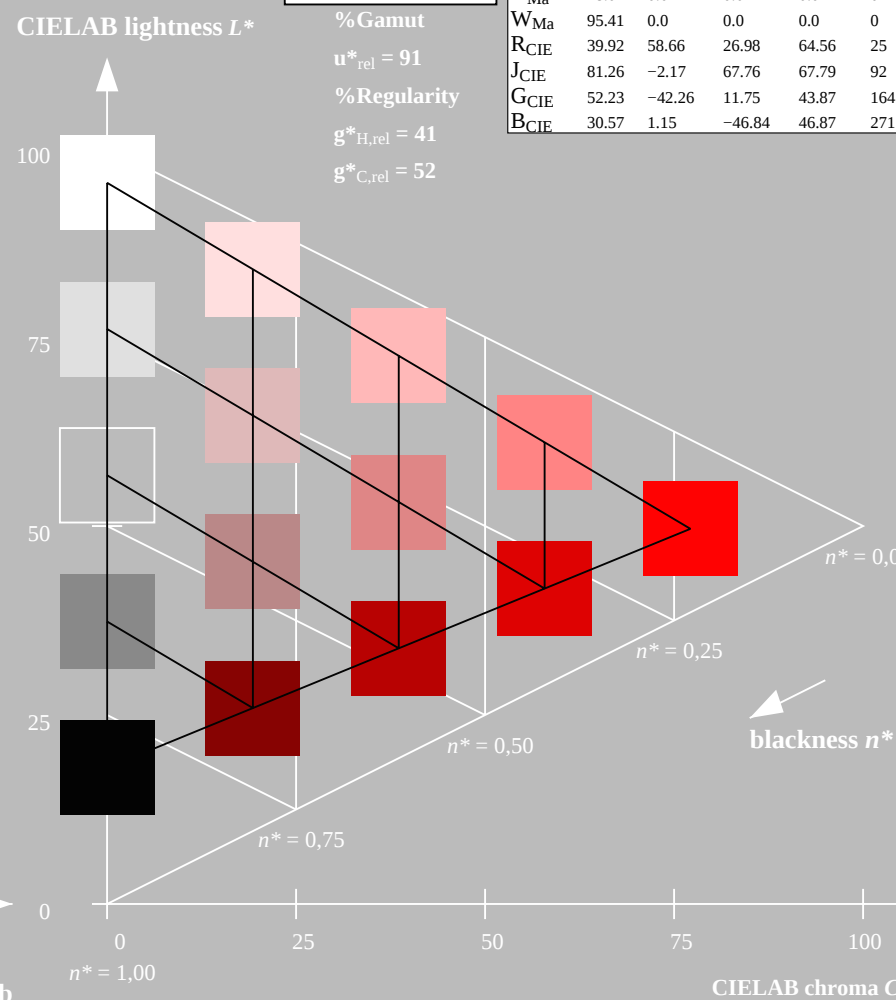
TE340-7, 5 step scales for constant CIELAB hue 30/360 = 0.083 (left)

Output: Colorimetric Reflective System MRS18
for hue $h^* = lab \cdot h = 30/360 = 0.083$
 $LAB \cdot LCH, LAB \cdot NCH$

D65: hue R
 $LCH \cdot Ma: 50 \ 77 \ 30$
 $olv \cdot Ma: 1.0 \ 0.0 \ 0.0$



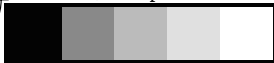
MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R_{Ma}	49.63	66.96	38.37	77.18	30
J_{Ma}	90.7	-6.36	88.75	88.98	94
G_{Ma}	52.11	-69.73	9.44	70.37	172
$G50B_{Ma}$	45.03	-36.57	-28.47	46.36	218
B_{Ma}	36.65	23.19	-63.05	67.18	290
$B50R_{Ma}$	34.94	57.17	-44.26	72.31	322
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



5 step scales for constant CIELAB hue 30/360 = 0.083 (right)

BAM-test chart TE34; Colorimetric systems MRS18 & MRS18
D65: Coordinate systems of 5 step colour scales for 10 hues

input: $olv \cdot setrgbcolor$
output: $olv \cdot setrgbcolor / w \cdot setgray$



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Input: Colorimetric Reflective System MRS18

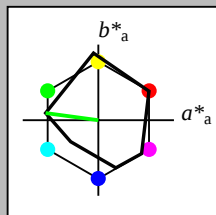
for hue $h^* = lab \cdot h = 172/360 = 0.479$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

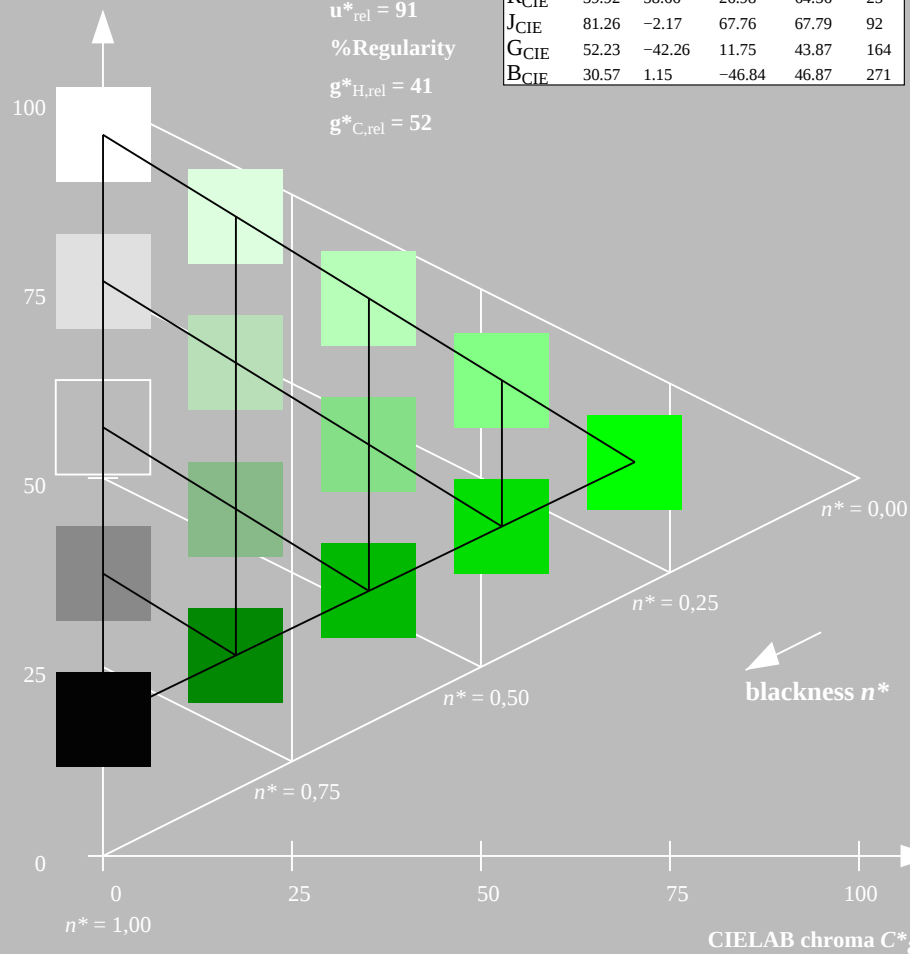
% Gamut

$u^*_{rel} = 91$

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



TE340-7, 5 step scales for constant CIELAB hue 172/360 = 0.479 (left)

Output: Colorimetric Reflective System MRS18

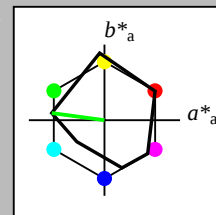
for hue $h^* = lab \cdot h = 172/360 = 0.479$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 52 70 172

olv*Ma: 0.0 1.0 0.0



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

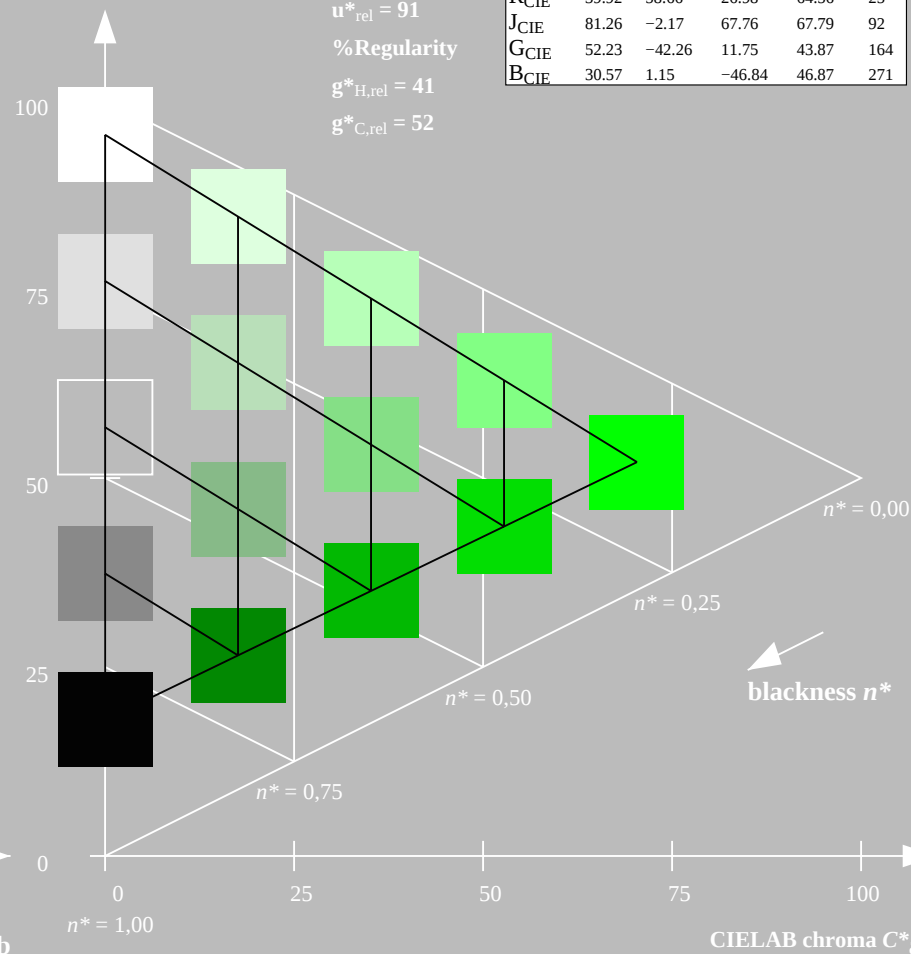
% Gamut

$u^*_{rel} = 91$

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



5 step scales for constant CIELAB hue 172/360 = 0.479 (right)

BAM-test chart TE34; Colorimetric systems MRS18 & MRS18
D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor
output: olv* setrgbcolor / w* setgray



Input: Colorimetric Reflective System MRS18

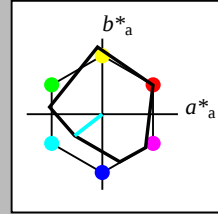
for hue $h^* = lab^*h = 218/360 = 0.605$

LAB*LCH, LAB*NCH

D65: hue G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

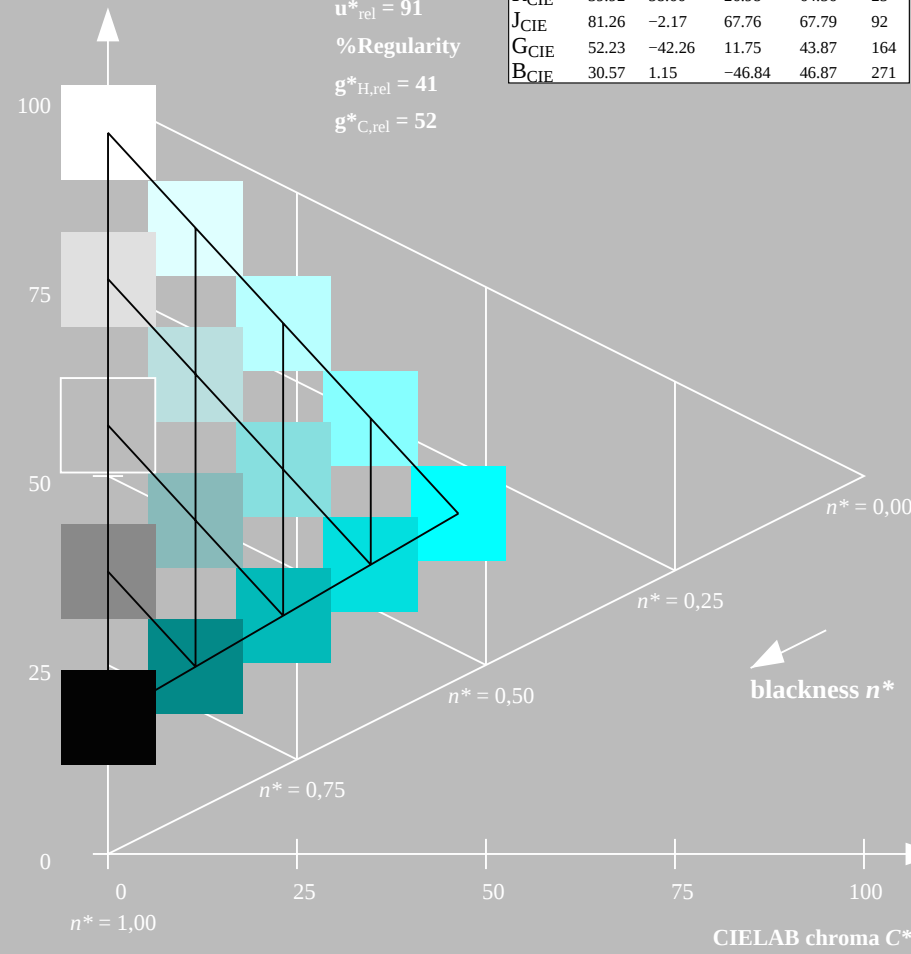
% Gamut

$u^*_{rel} = 91$

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



TE340-7, 5 step scales for constant CIELAB hue 218/360 = 0.605 (left)

Output: Colorimetric Reflective System MRS18

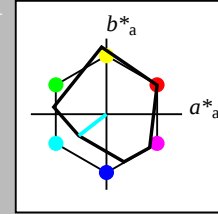
for hue $h^* = lab^*h = 218/360 = 0.605$

LAB*LCH, LAB*NCH

D65: hue G50B

LCH*Ma: 45 46 218

olv*Ma: 0.0 1.0 1.0



MRS18; adapted (a) CIELAB data					
	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

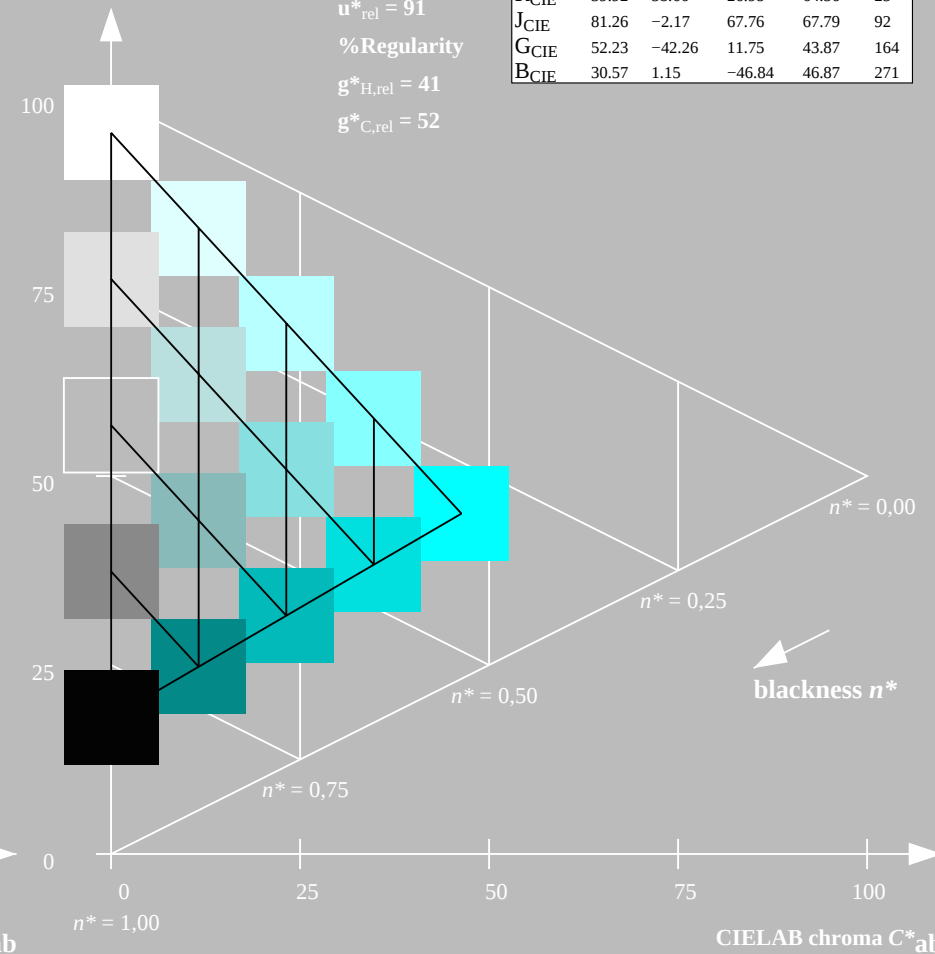
% Gamut

$u^*_{rel} = 91$

% Regularity

$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



5 step scales for constant CIELAB hue 218/360 = 0.605 (right)

BAM-test chart TE34; Colorimetric systems MRS18 & MRS18
D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor
output: olv* setrgbcolor / w* setgray



output: *olv* setrgbcolor / w* setgray*

output: *olv* setrgbcolor / w* setgray*

output: *olv* setrgbcolor / w* setgray*

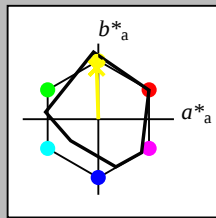
Input: Colorimetric Reflective System MRS18

*LAB*LCH, LAB*NCH*

D65: hue J

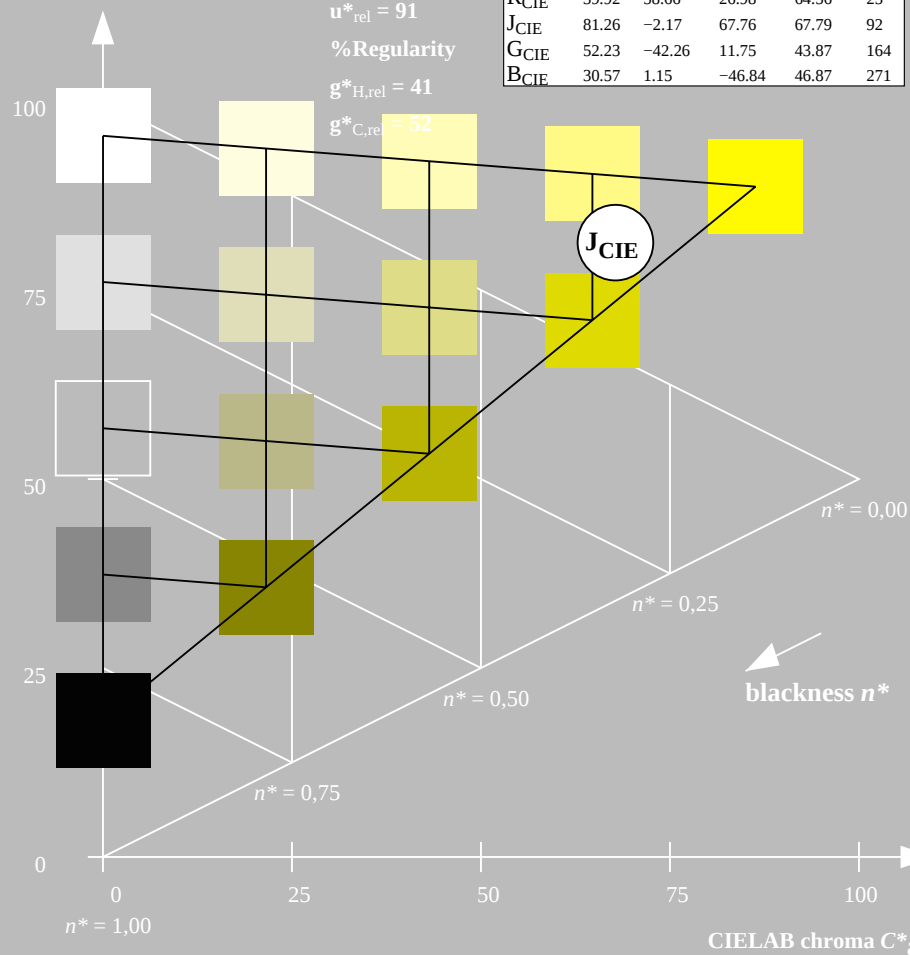
LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0



MRS18; adapted (a) CIELAB data					
	$L^* = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

$$g^*_{C,rel} = 52$$


TE340-7, 5 step scales for constant CIELAB hue $92/360 = 0.255$ (left)

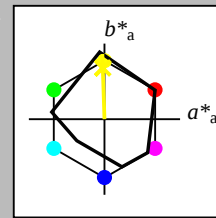
Output: Colorimetric Reflective System MRS18

*LAB*LCH, LAB*NCH*

D65: hue J

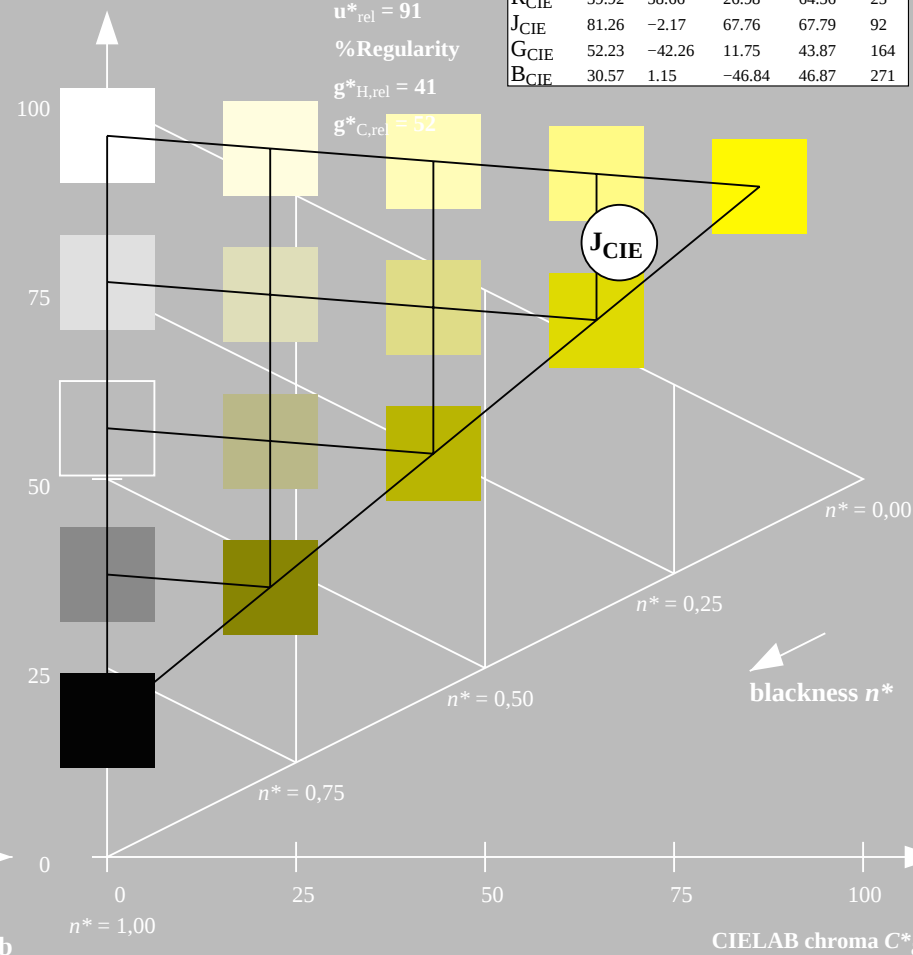
LCH*Ma: 89 86 92

olv*Ma: 1.0 0.95 0.0



MRS18; adapted (a) CIELAB data					
	L^*_{Ma}	a^*_{Ma}	b^*_{Ma}	$C^*_{ab,Ma}$	$h^*_{ab,Ma}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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

CIELAB lightness L^*

$$g^*_{H,rel} = 41$$
$$g^*_{C,rel} = 52$$
5 step scales for constant CIELAB hue $92/360 = 0.255$ (right)

BAM-test chart TE34: Colorimetric systems MRS18 & MRS18

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

```
input: olv* setrgbcolor
```

output: *olv* setrgbcolor / w* setgray*

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 164/360 = 0.457$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

CIELAB lightness L^*

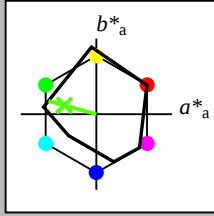
% Gamut

$u^*_{rel} = 91$

% Regularity

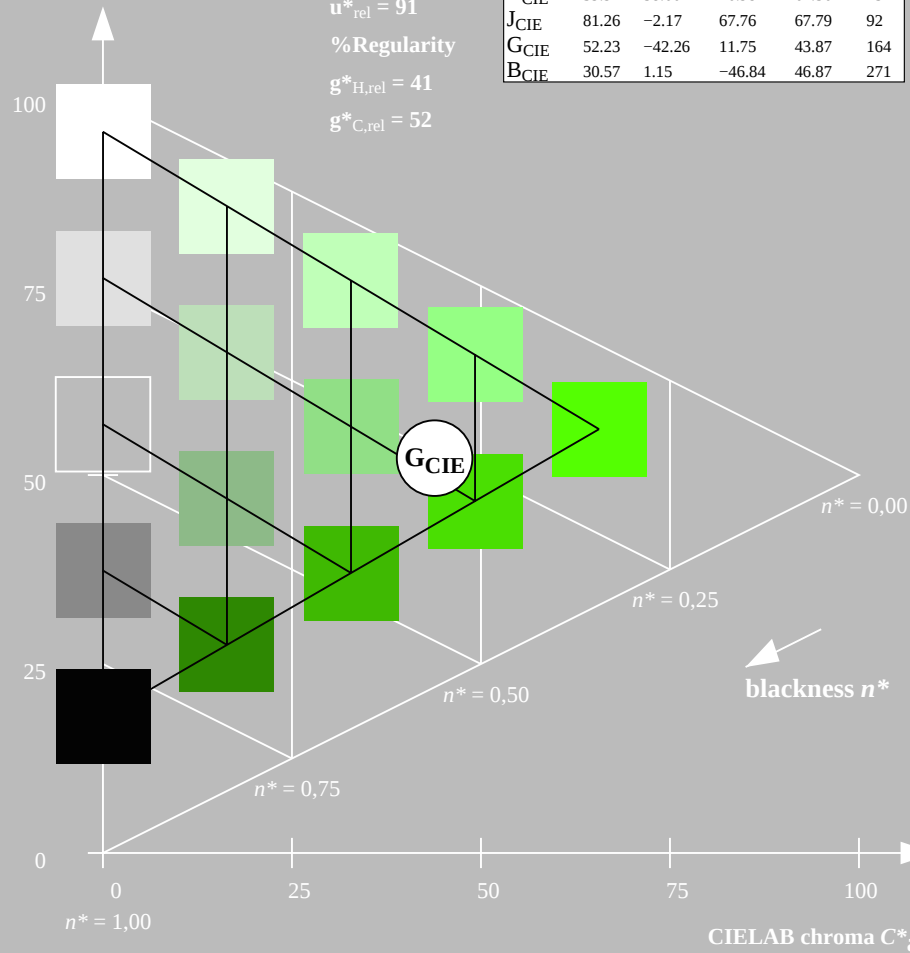
$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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



TE340-7, 5 step scales for constant CIELAB hue 164/360 = 0.457 (left)

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 164/360 = 0.457$

LAB*LCH, LAB*NCH

D65: hue G

LCH*Ma: 56 66 164

olv*Ma: 0.1 1.0 0.0

CIELAB lightness L^*

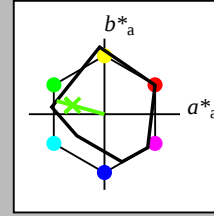
% Gamut

$u^*_{rel} = 91$

% Regularity

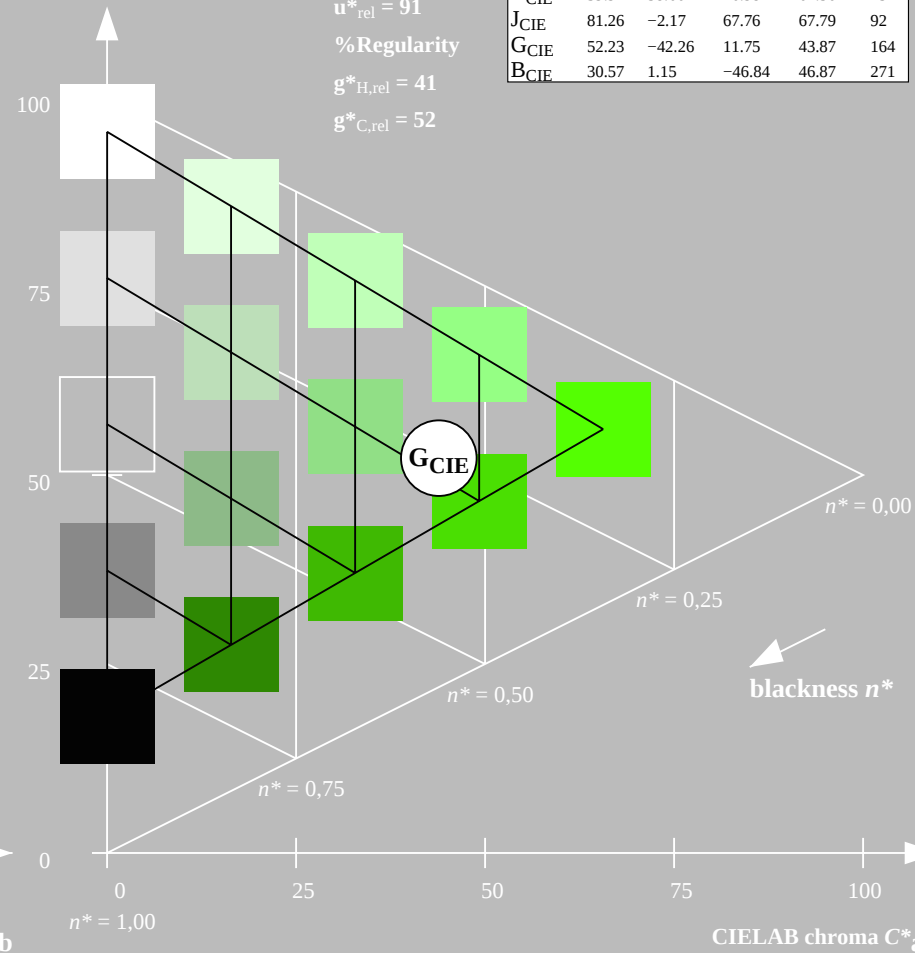
$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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



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

BAM-test chart TE34; Colorimetric systems MRS18 & MRS18
D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor
output: olv* setrgbcolor / w* setgray

Input: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 271/360 = 0.754$

LAB*LCH, LAB*NCH

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

CIELAB lightness L^*

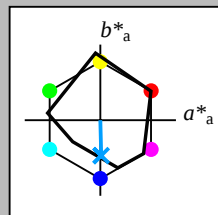
% Gamut

$u^*_{rel} = 91$

% Regularity

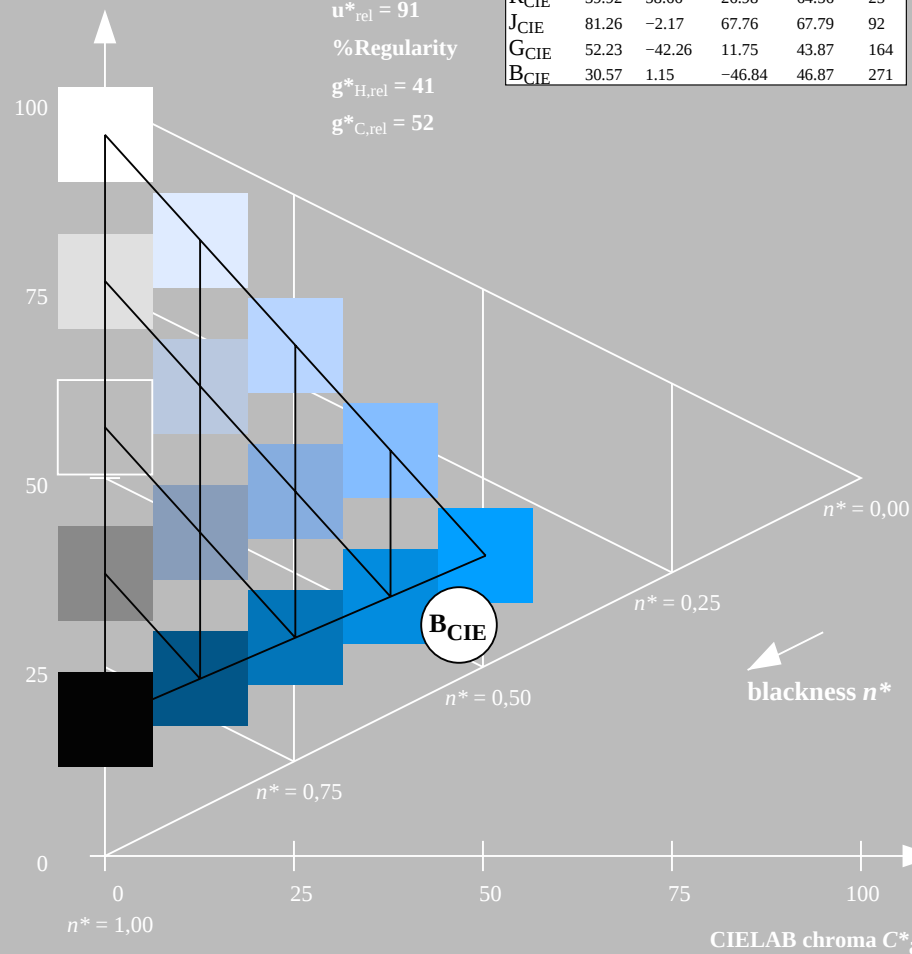
$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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



TE340-7, 5 step scales for constant CIELAB hue 271/360 = 0.754 (left)

Output: Colorimetric Reflective System MRS18

for hue $h^* = lab \cdot h = 271/360 = 0.754$

LAB*LCH, LAB*NCH

D65: hue B

LCH*Ma: 40 50 271

olv*Ma: 0.0 0.37 1.0

CIELAB lightness L^*

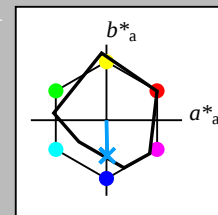
% Gamut

$u^*_{rel} = 91$

% Regularity

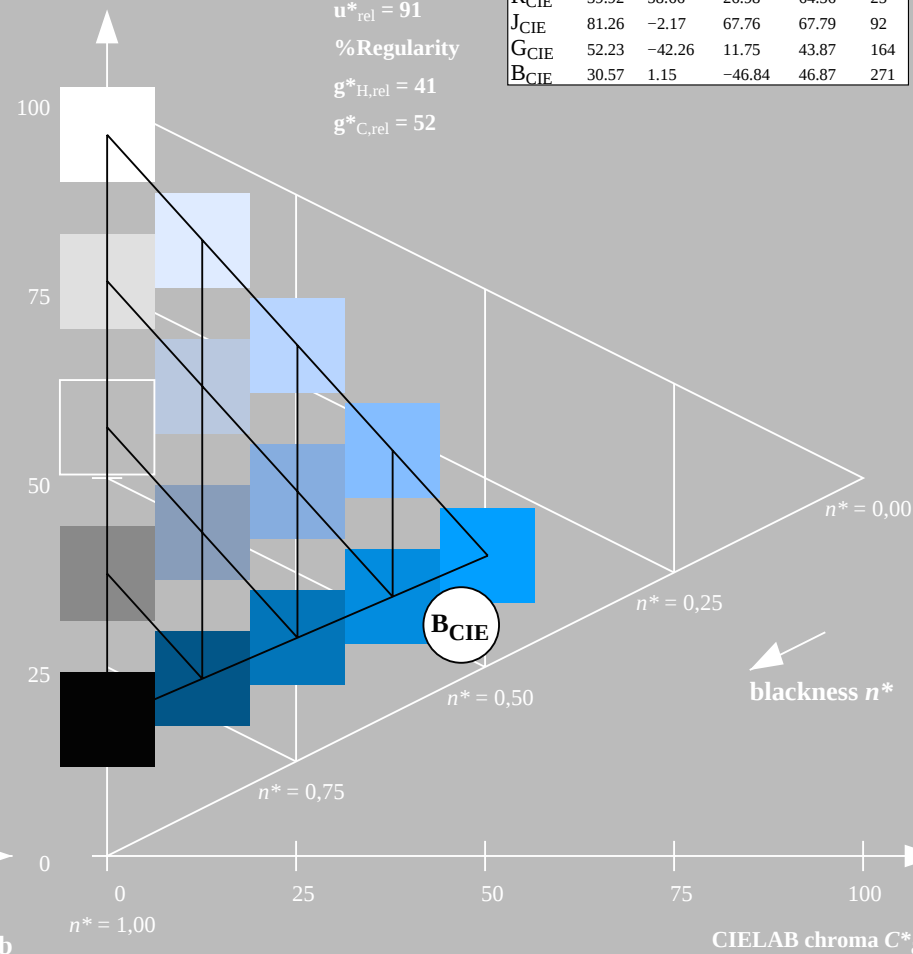
$g^*_{H,rel} = 41$

$g^*_{C,rel} = 52$



MRS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R _{Ma}	49.63	66.96	38.37	77.18	30
J _{Ma}	90.7	-6.36	88.75	88.98	94
G _{Ma}	52.11	-69.73	9.44	70.37	172
G50B _{Ma}	45.03	-36.57	-28.47	46.36	218
B _{Ma}	36.65	23.19	-63.05	67.18	290
B50R _{Ma}	34.94	57.17	-44.26	72.31	322
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



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

BAM-test chart TE34; Colorimetric systems MRS18 & MRS18
D65: Coordinate systems of 5 step colour scales for 10 hues

input: olv* setrgbcolor
output: olv* setrgbcolor / w* setgray