

Input: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 36/360 = 0.1$

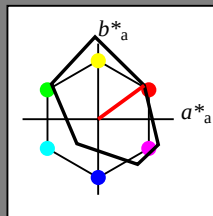
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 35 76 36

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

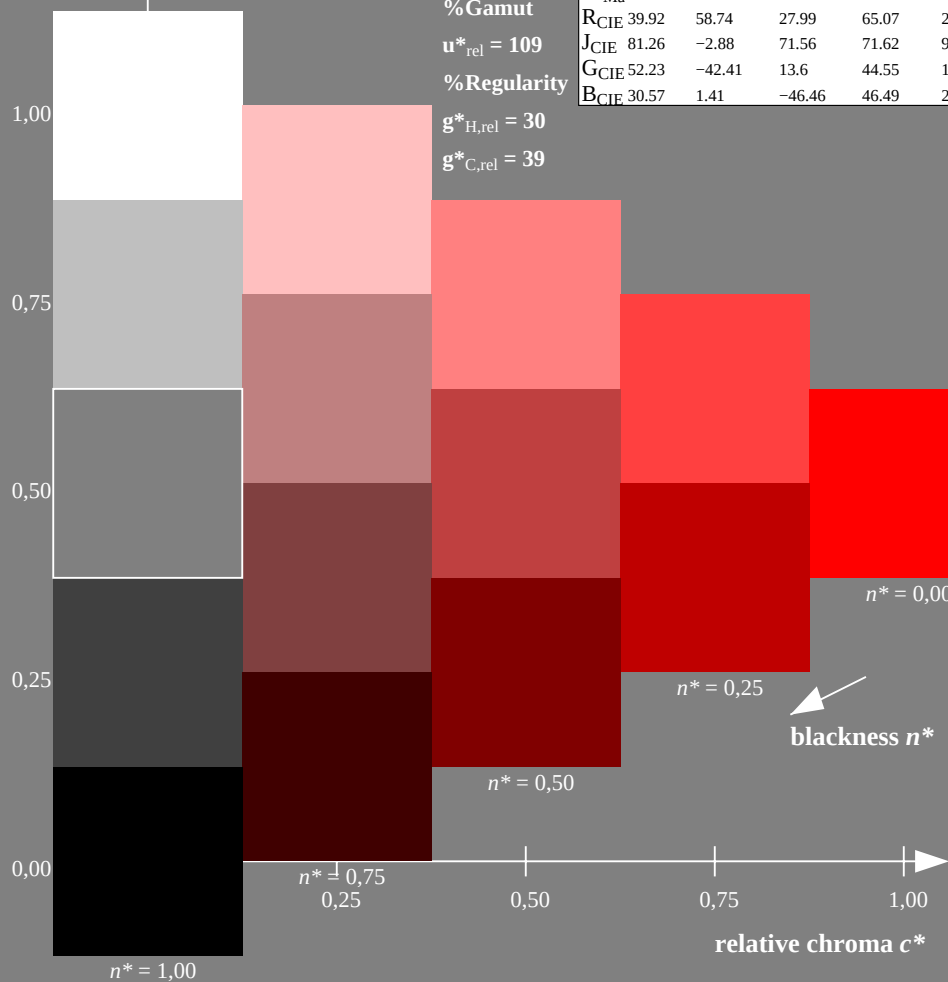
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 36/360 = 0.1 (left)

Output: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 36/360 = 0.1$

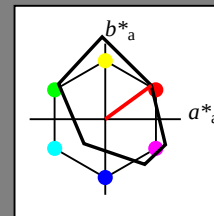
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 35 76 36

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

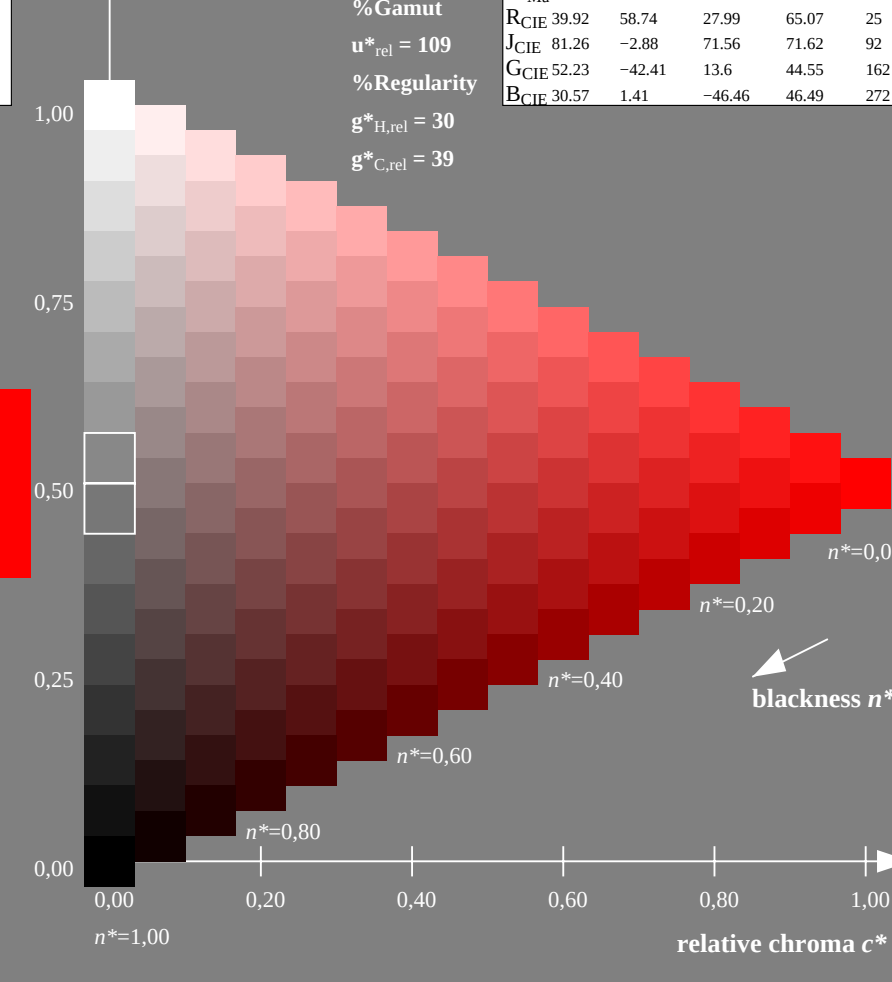
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



16 step scales for constant CIELAB hue 36/360 = 0.1 (right)

De62: Test chart 1 according to DIN 33872-2, Hue O, Page 1/11 input: rgb ($\rightarrow olv^*$) $setrgbcolor$
Discrimination of 5 and 16 step colour scales, ORS18a

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

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

lab^*tch and lab^*nch

D65: hue Y

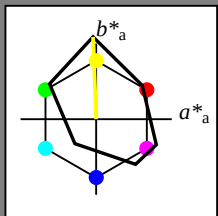
LCH*Ma: 84 109 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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



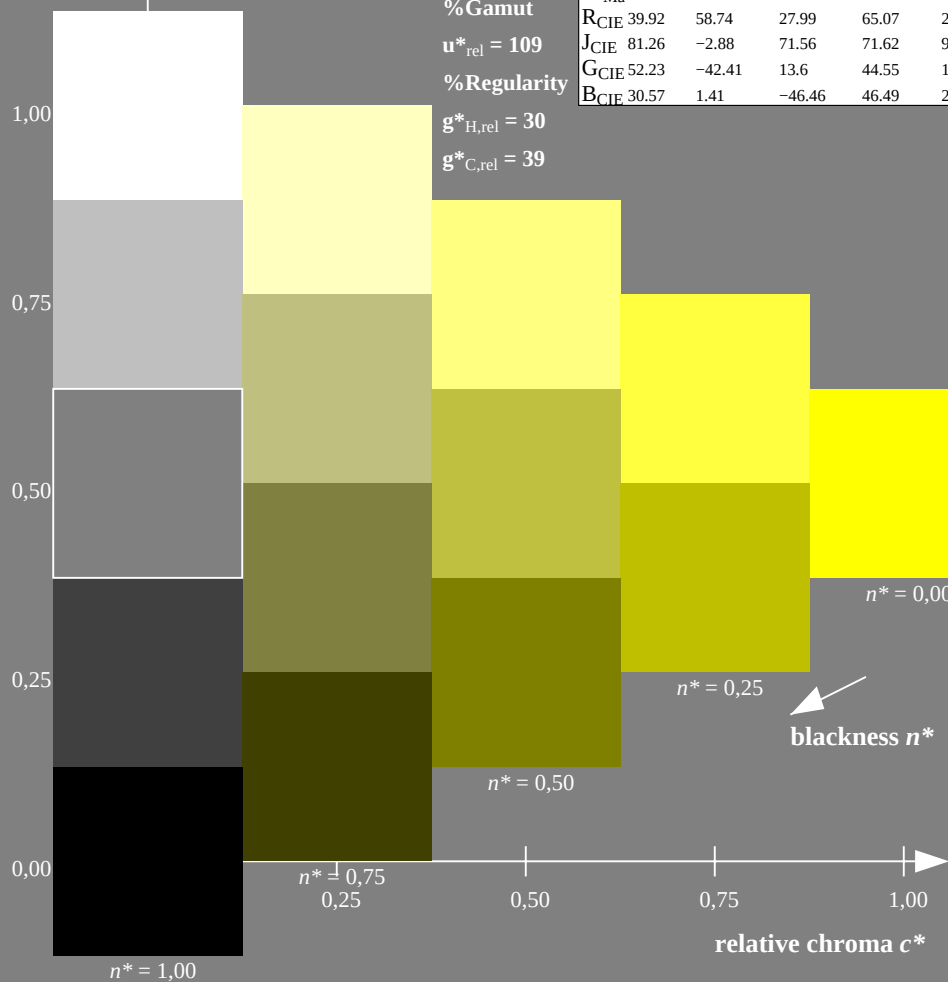
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

Output: Colorimetric Offset Reflective System ORS18a

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

lab^*tch and lab^*nch

D65: hue Y

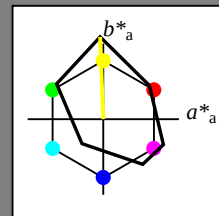
LCH*Ma: 84 109 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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



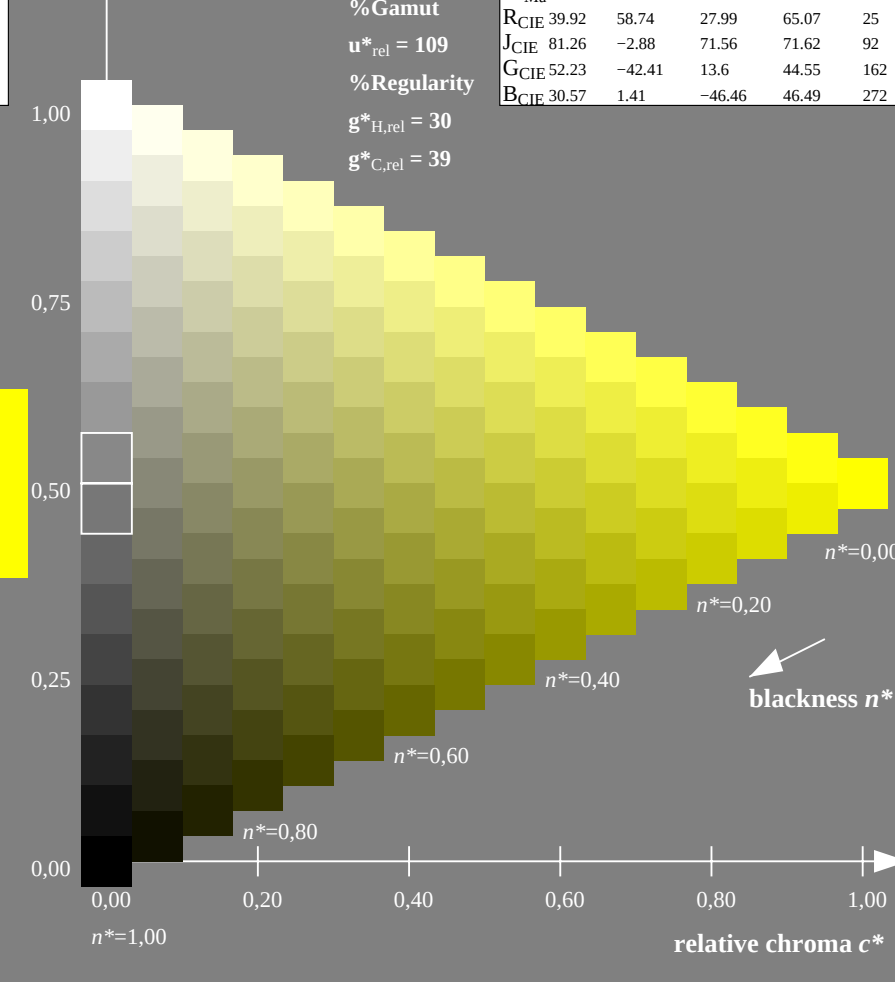
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



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

De62: Test chart 1 according to DIN 33872-2, Hue Y, Page 2/11 input: $rgb (->olv^*)$ setrgbcolor
Discrimination of 5 and 16 step colour scales, ORS18a

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 143/360 = 0.397$

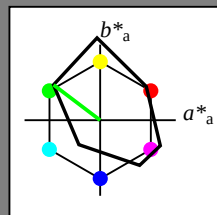
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 43 77 143

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

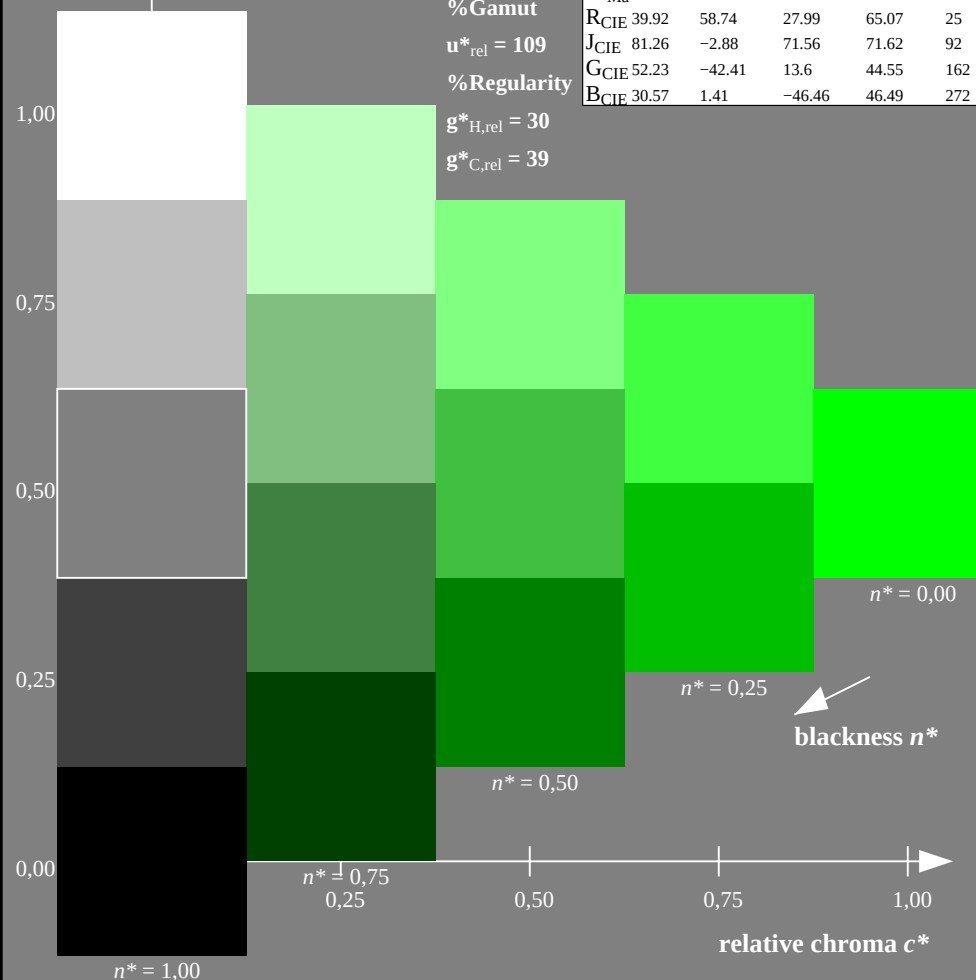
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 143/360 = 0.397 (left)

De62: Test chart 1 according to DIN 33872-2, Hue L, Page 3/11 input: $rgb (->olv^*)$ setrgbcolor

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 143/360 = 0.397$

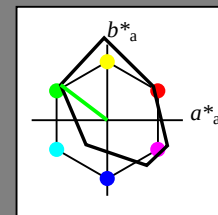
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 43 77 143

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

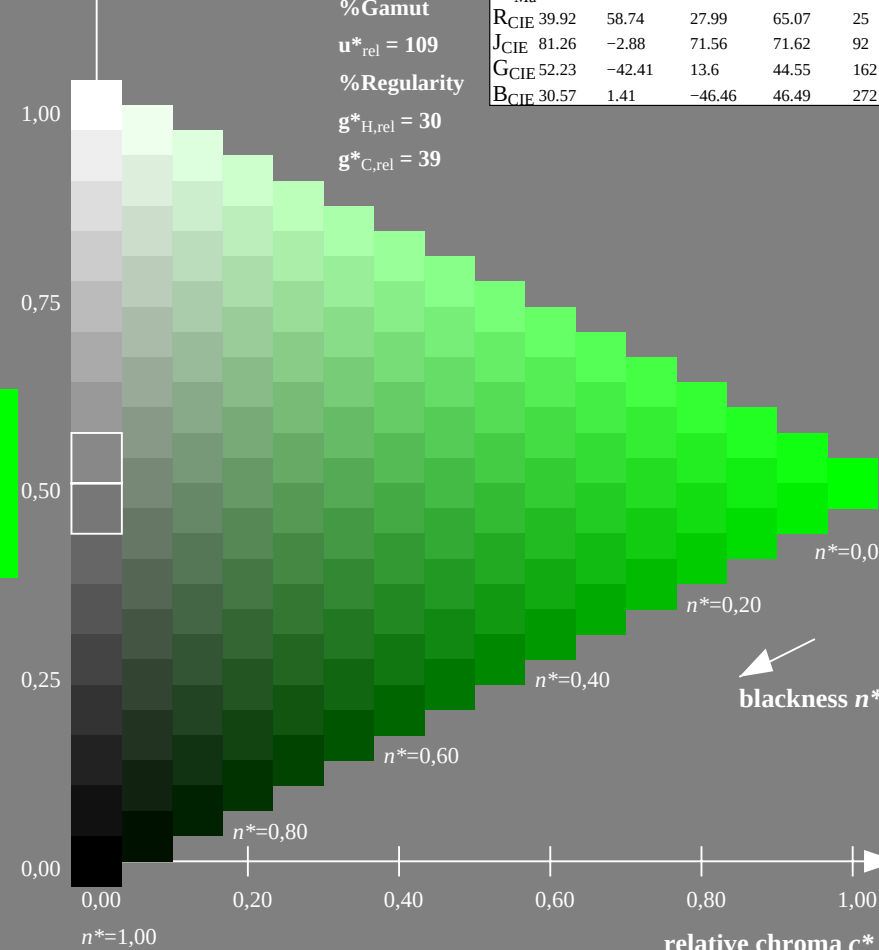
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



16 step scales for constant CIELAB hue 143/360 = 0.397 (right)

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 229/360 = 0.636$

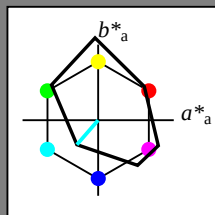
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 52 43 229

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

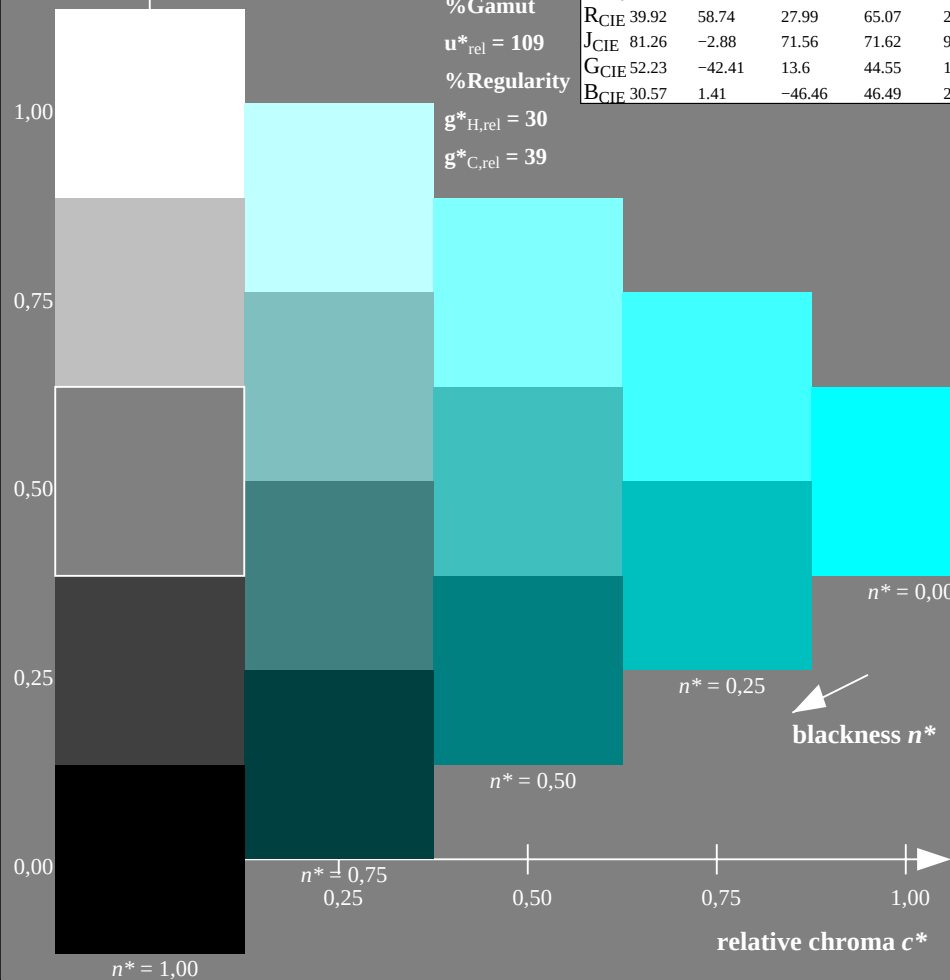
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 229/360 = 0.636 (left)

De62: Test chart 1 according to DIN 33872-2, Hue C, Page 4/11 input: $rgb (->olv^*)$ setrgbcolor

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 229/360 = 0.636$

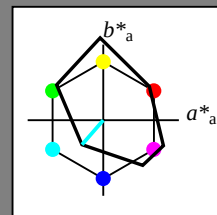
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 52 43 229

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

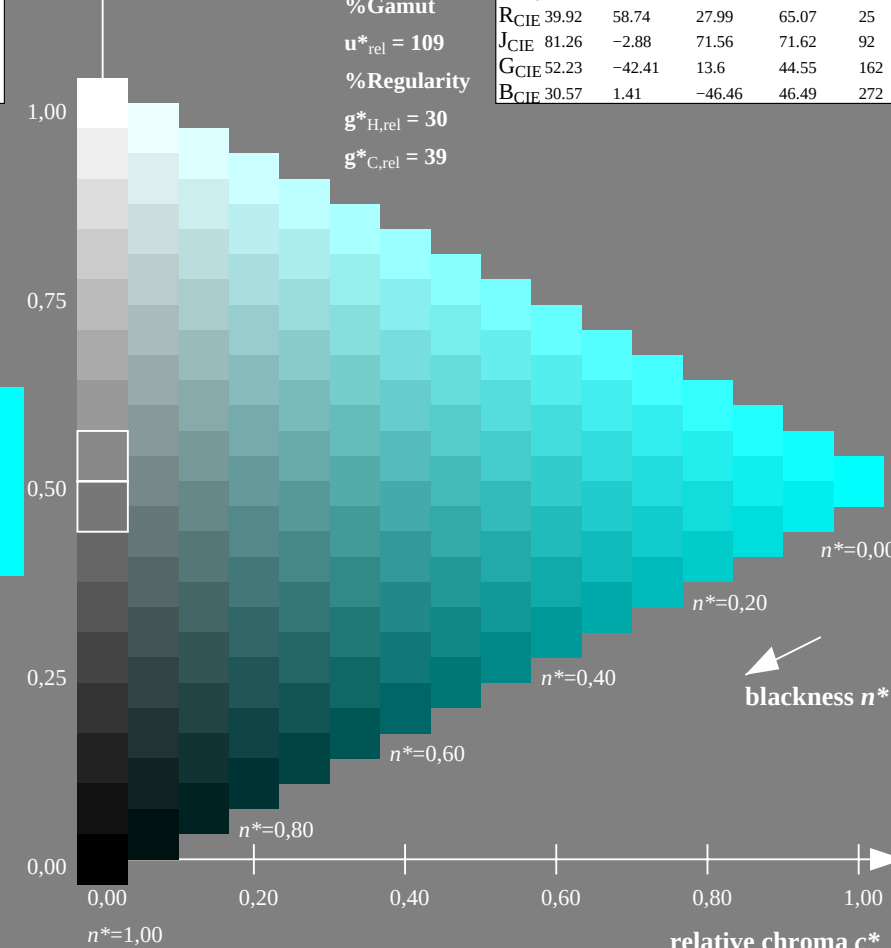
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



16 step scales for constant CIELAB hue 229/360 = 0.636 (right)

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 311/360 = 0.864$

lab^*tch and lab^*nch

D65: hue V

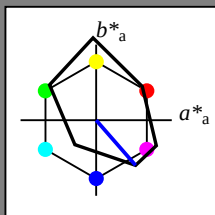
LCH*Ma: 14 79 311

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
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V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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



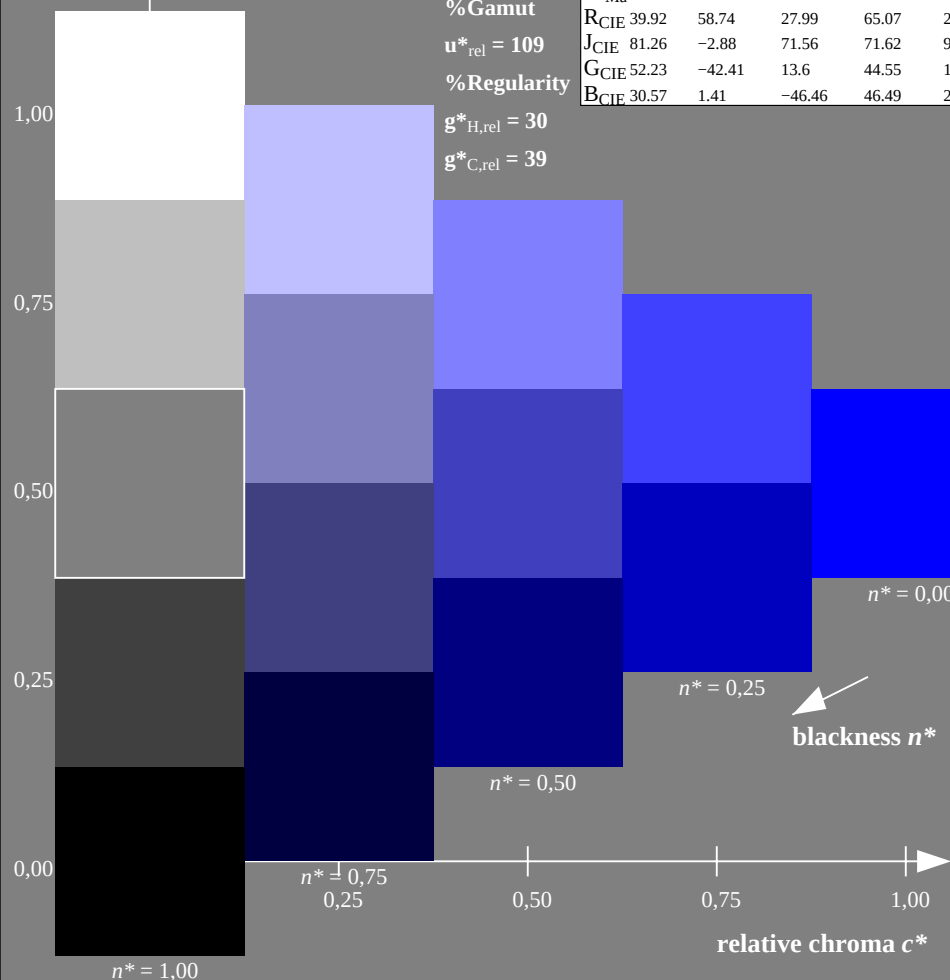
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIE LAB hue 311/360 = 0.864 (left)

De62: Test chart 1 according to DIN 33872-2, Hue V, Page 5/11 input: rgb ($\rightarrow olv^*$) $setrgbcolor$

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 311/360 = 0.864$

lab^*tch and lab^*nch

D65: hue V

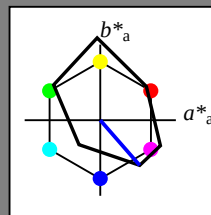
LCH*Ma: 14 79 311

olv*Ma: 0.0 0.0 1.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
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M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	0.0	0.0	0.0	0
R _{CIE}	39.92	58.74	27.99	65.07	25
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G _{CIE}	52.23	-42.41	13.6	44.55	162
B _{CIE}	30.57	1.41	-46.46	46.49	272



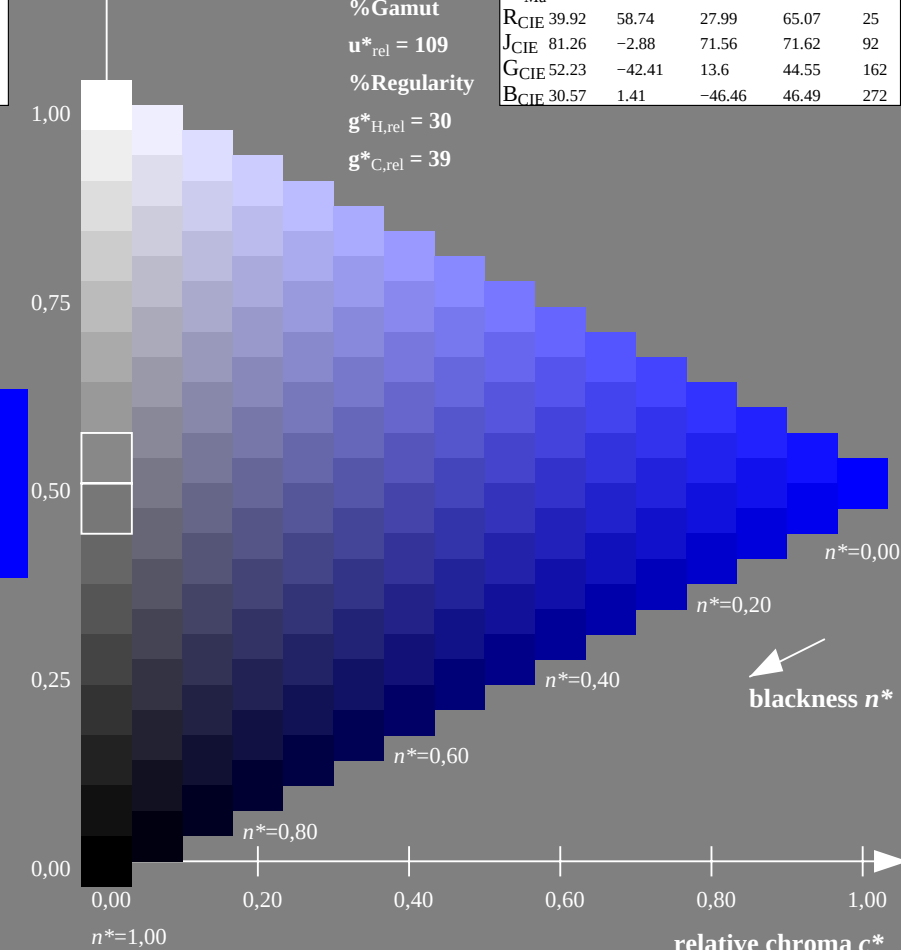
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



16 step scales for constant CIE LAB hue 311/360 = 0.864 (right)

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 337/360 = 0.936$

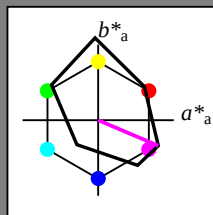
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 38 86 337

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

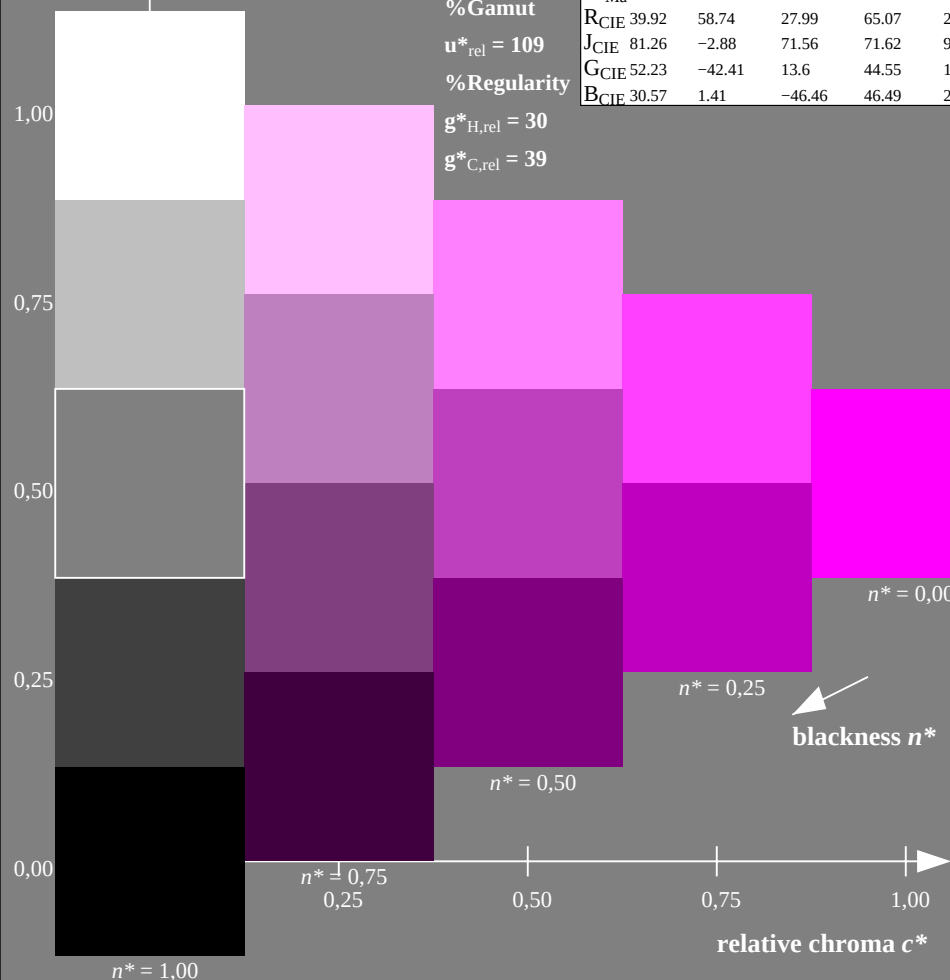
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 337/360 = 0.936 (left)

De62: Test chart 1 according to DIN 33872-2, Hue M, Page 6/11
Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

for hue $h^* = lab^*h = 337/360 = 0.936$

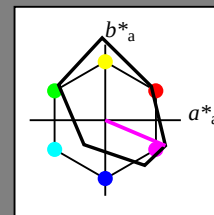
lab^*tch and lab^*nch

D65: hue M

LCH*Ma: 38 86 337

olv*Ma: 1.0 0.0 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
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V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

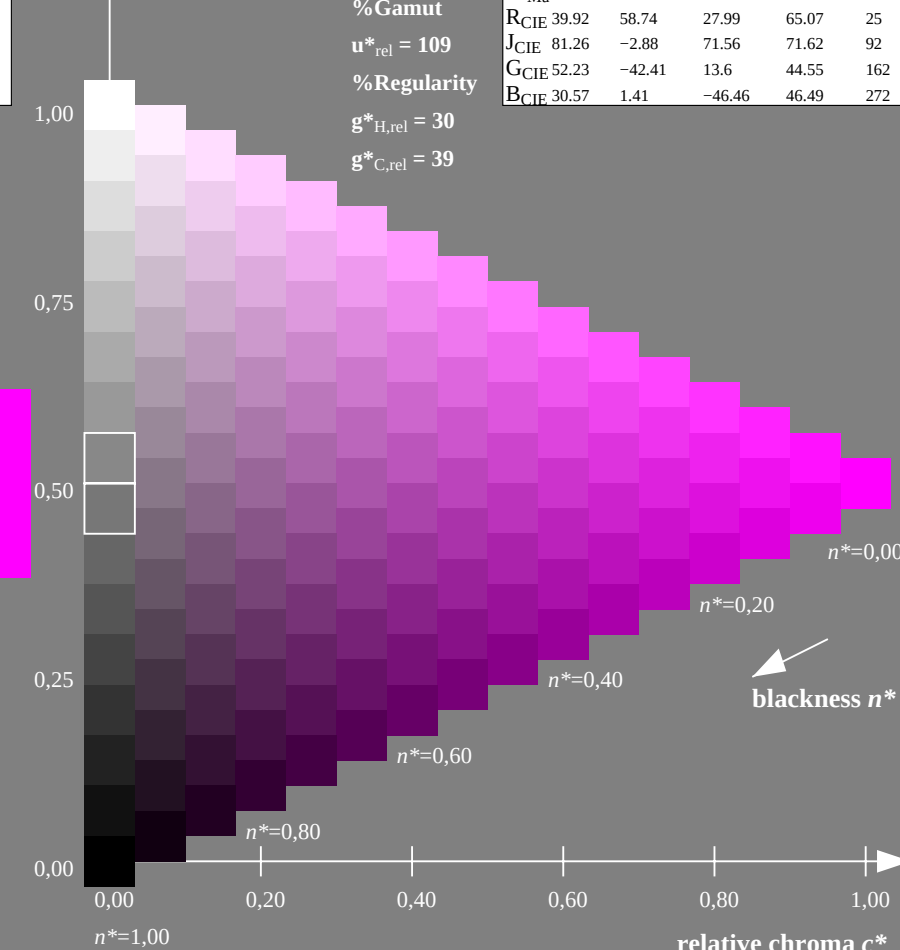
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



16 step scales for constant CIELAB hue 337/360 = 0.936 (right)

input: $rgb (->olv^*)$ setrgbcolor
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

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

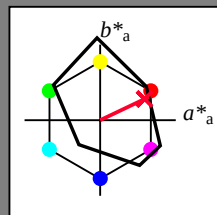
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 36 71 25

olv*Ma: 1.0 0.0 0.18

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

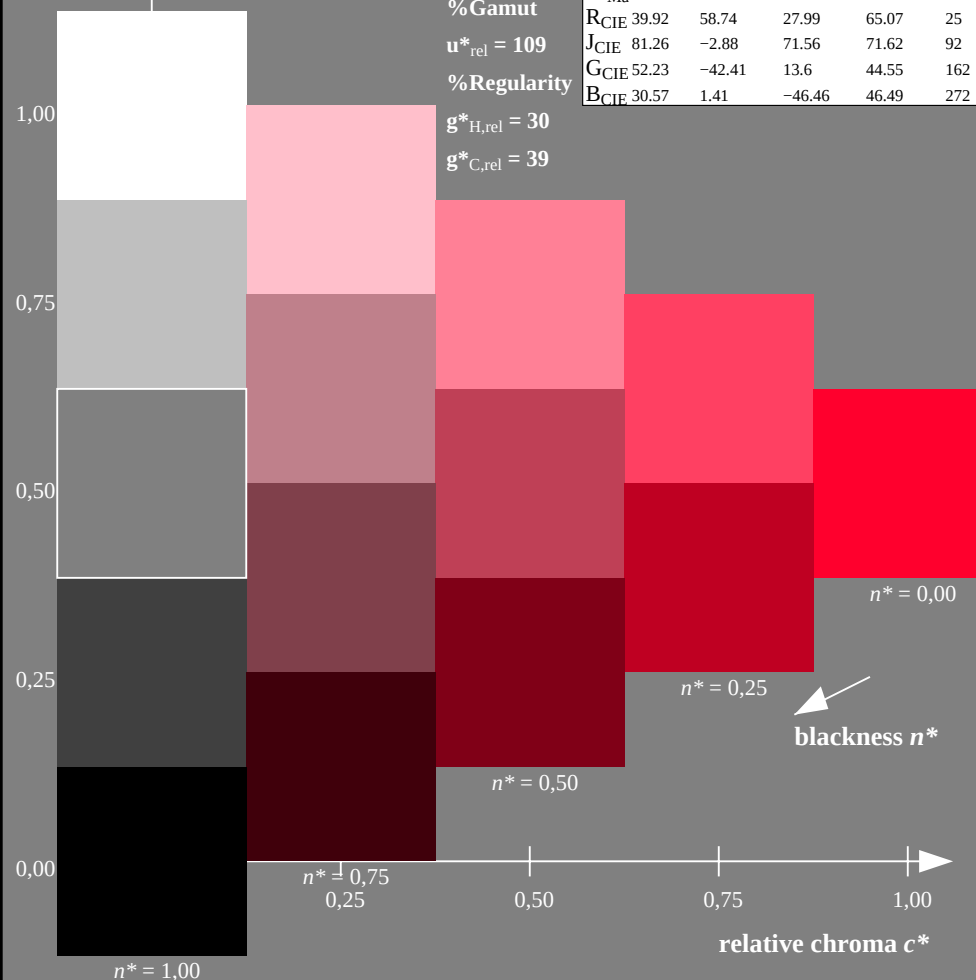
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 25/360 = 0.071 (left)

De62: Test chart 1 according to DIN 33872-2, Hue R, Page 7/11 input: rgb ($\rightarrow rgb^*$) $setrgbcolor$

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

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

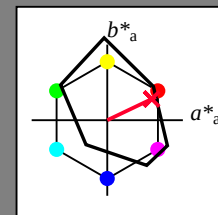
lab^*tch and lab^*nch

D65: hue R

LCH*Ma: 36 71 25

olv*Ma: 1.0 0.0 0.18

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

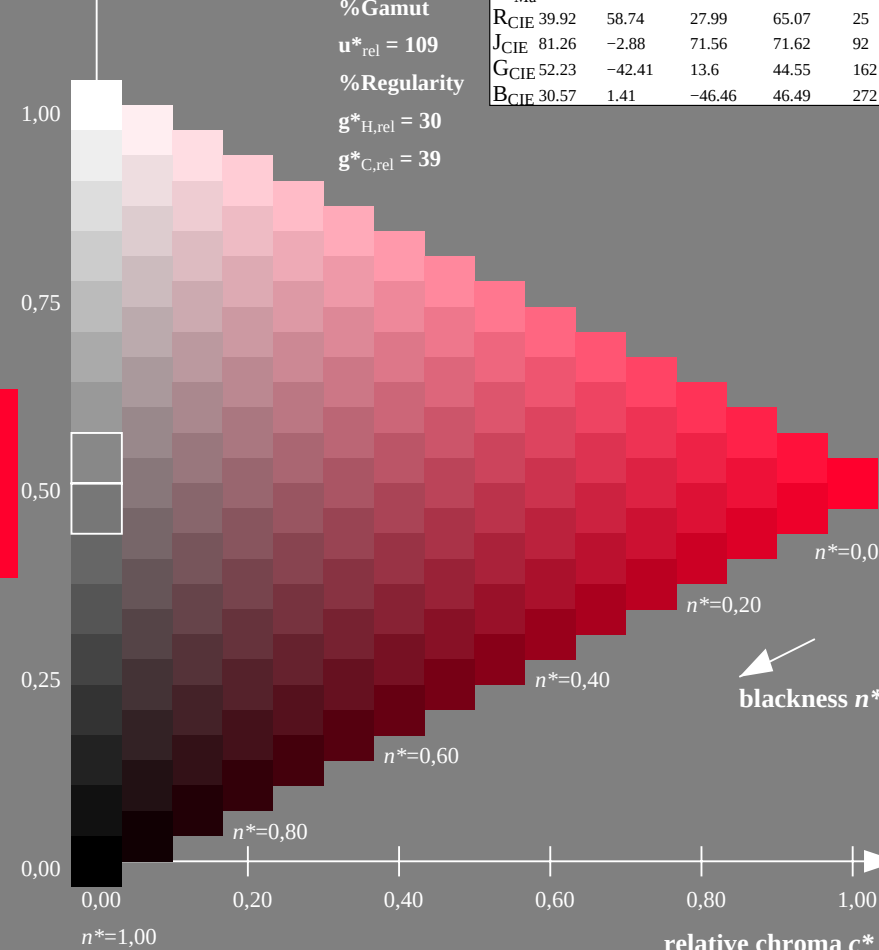
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



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

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

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

lab^*tch and lab^*nch

D65: hue J

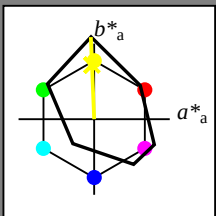
LCH*Ma: 83 109 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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



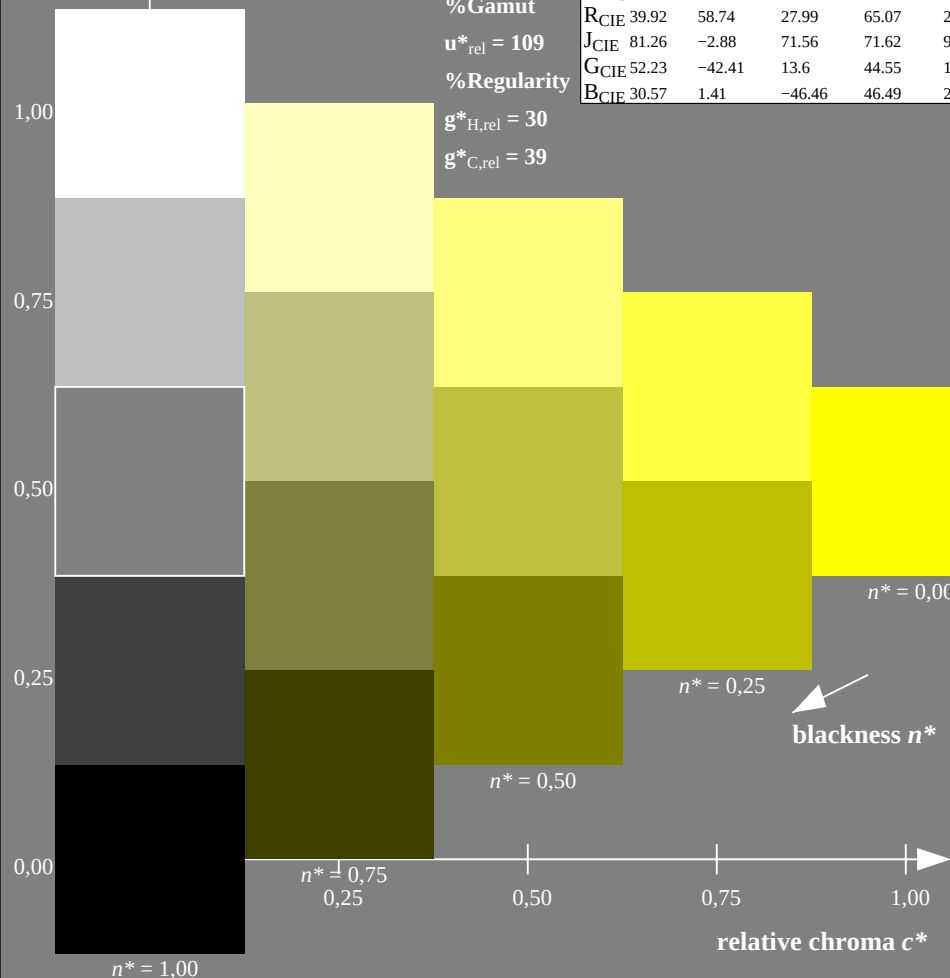
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 92/360 = 0.256 (left)

De62: Test chart 1 according to DIN 33872-2, Hue J, Page 8/11
Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

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

lab^*tch and lab^*nch

D65: hue J

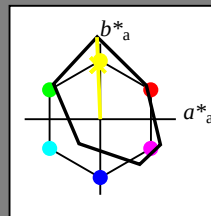
LCH*Ma: 83 109 92

olv*Ma: 1.0 1.0 0.0

triangle lightness t^*

ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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



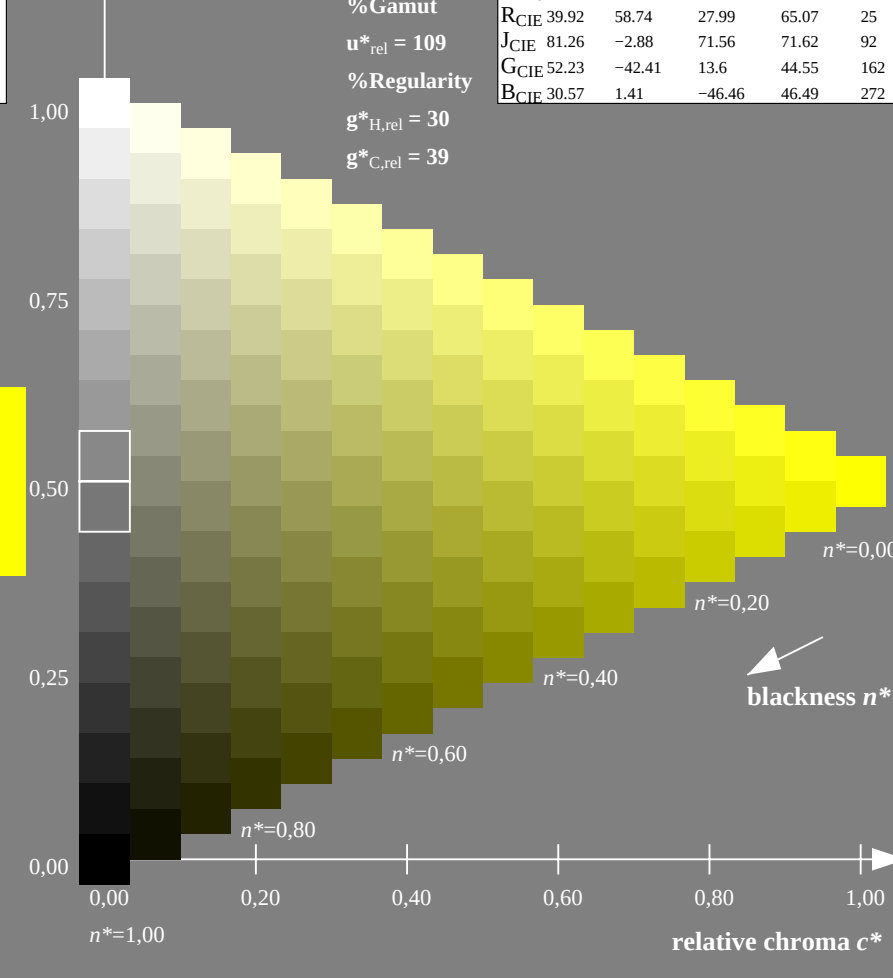
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



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

input: rgb ($\rightarrow rgb^*$) $setrgbcolor$
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

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

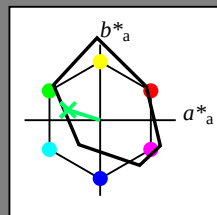
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 47 51 162

olv*Ma: 0.0 1.0 0.39

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

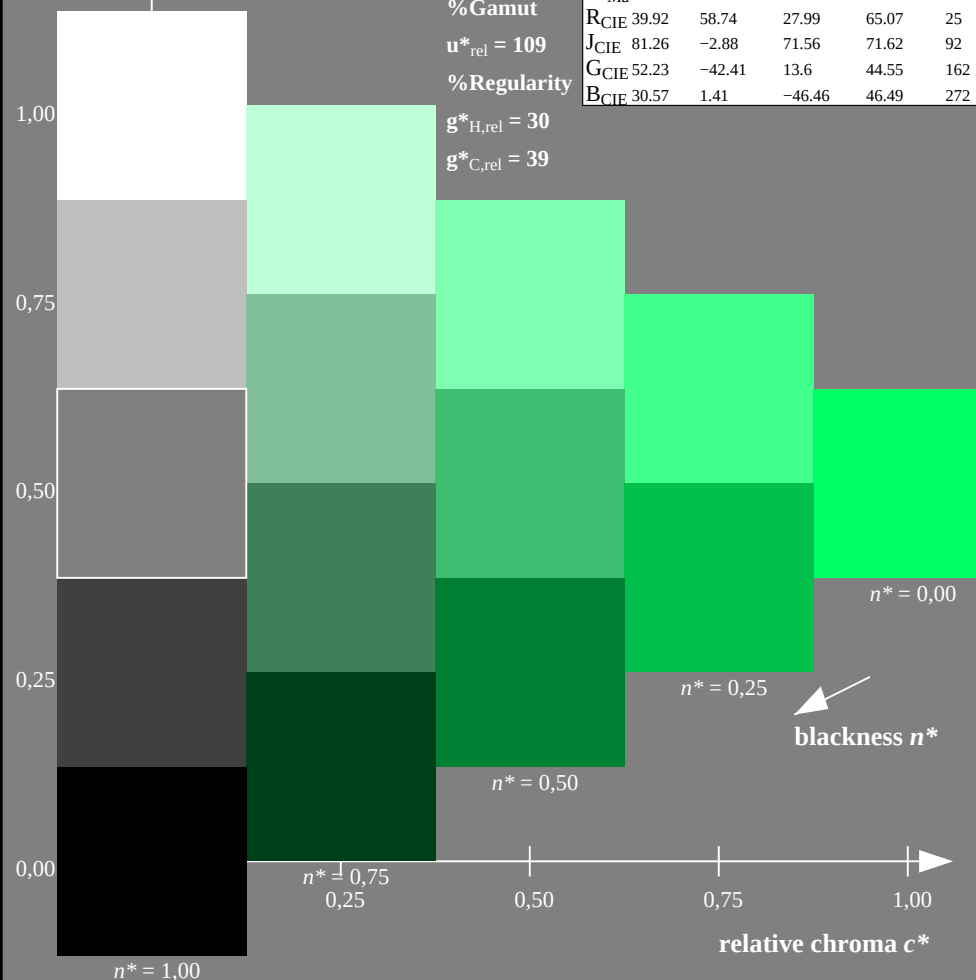
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 162/360 = 0.451 (left)

De62: Test chart 1 according to DIN 33872-2, Hue G, Page 9/11 input: $rgb (->rgb^*)$ setrgbcolor

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

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

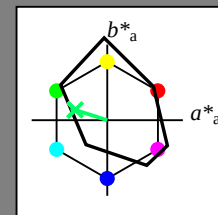
lab^*tch and lab^*nch

D65: hue G

LCH*Ma: 47 51 162

olv*Ma: 0.0 1.0 0.39

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

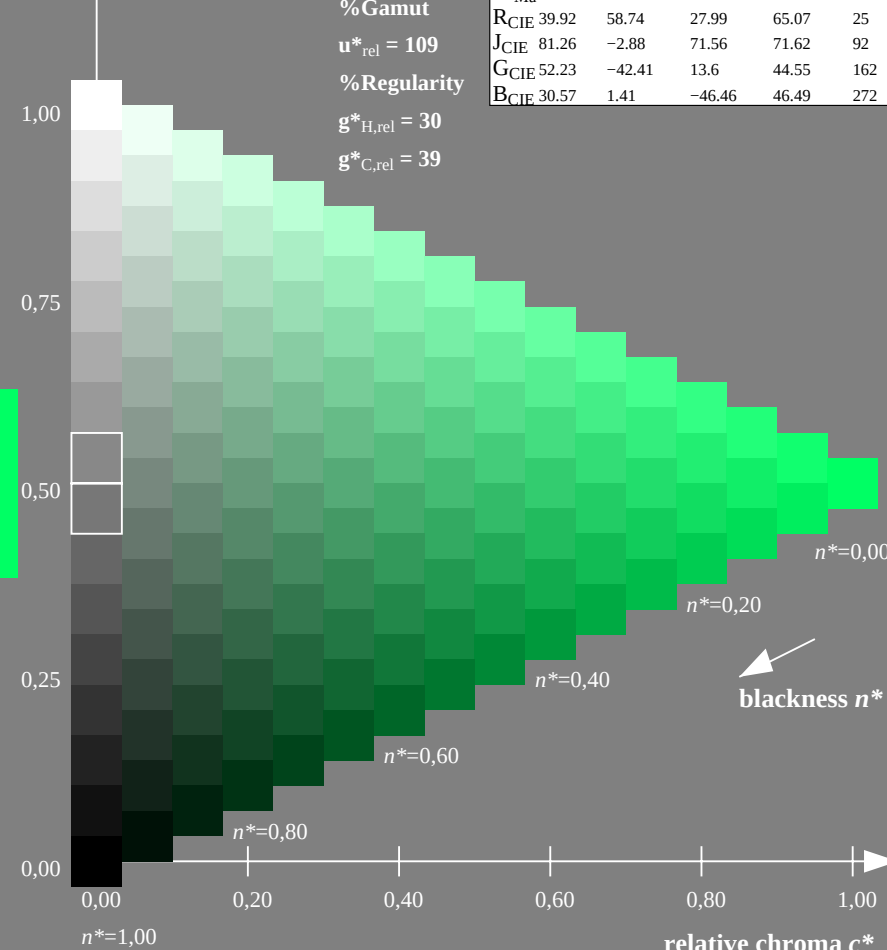
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



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

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18a

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

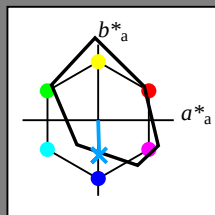
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 38 42 272

olv*Ma: 0.0 0.63 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

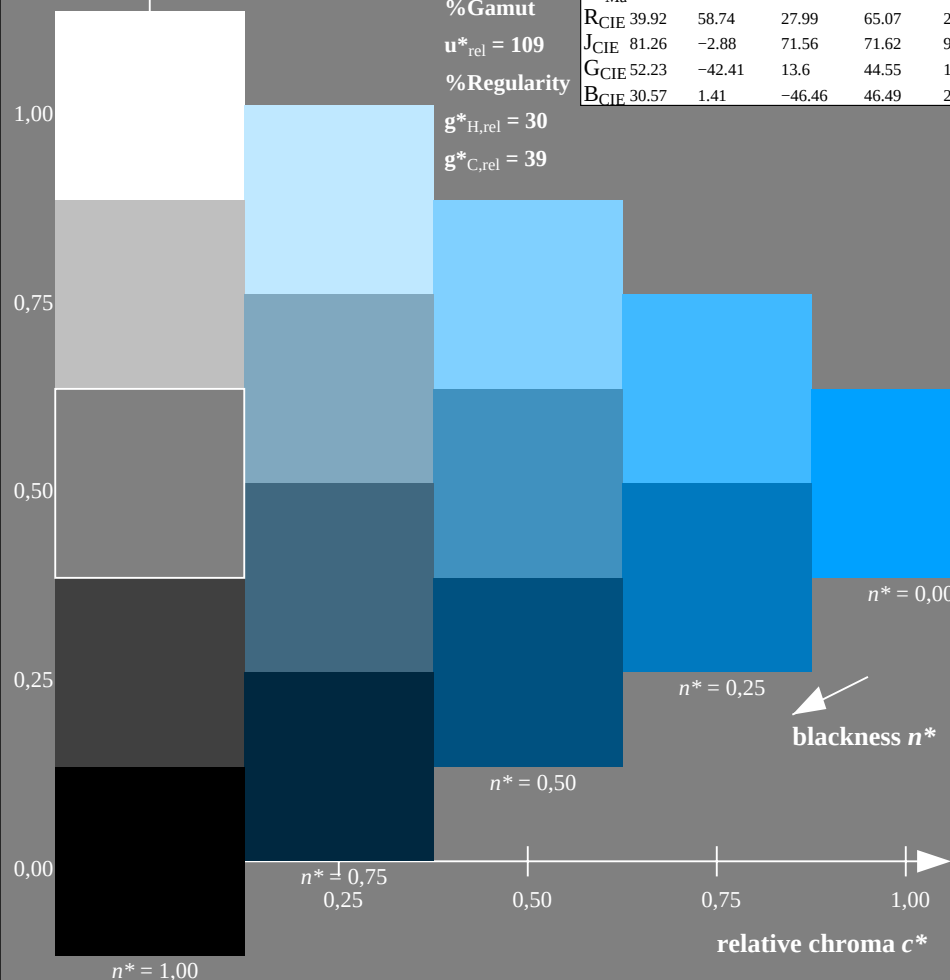
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



De620-7N, 5 step scales for constant CIELAB hue 272/360 = 0.755 (left)

De62: Test chart 1 according to DIN 33872-2, Hue B, Page 10/1

Discrimination of 5 and 16 step colour scales, ORS18a

Output: Colorimetric Offset Reflective System ORS18a

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

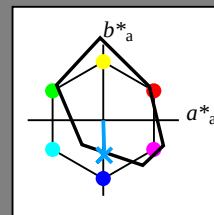
lab^*tch and lab^*nch

D65: hue B

LCH*Ma: 38 42 272

olv*Ma: 0.0 0.63 1.0

triangle lightness t^*



ORS18a; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	35.32	60.99	44.6	75.56	36
Y _{Ma}	83.65	-4.11	108.86	108.94	92
L _{Ma}	43.49	-61.66	46.73	77.37	143
C _{Ma}	52.18	-28.14	-32.36	42.9	229
V _{Ma}	13.71	52.15	-59.7	79.28	311
M _{Ma}	37.69	79.56	-33.73	86.42	337
N _{Ma}	8.99	0.0	0.0	0.0	0
W _{Ma}	92.16	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

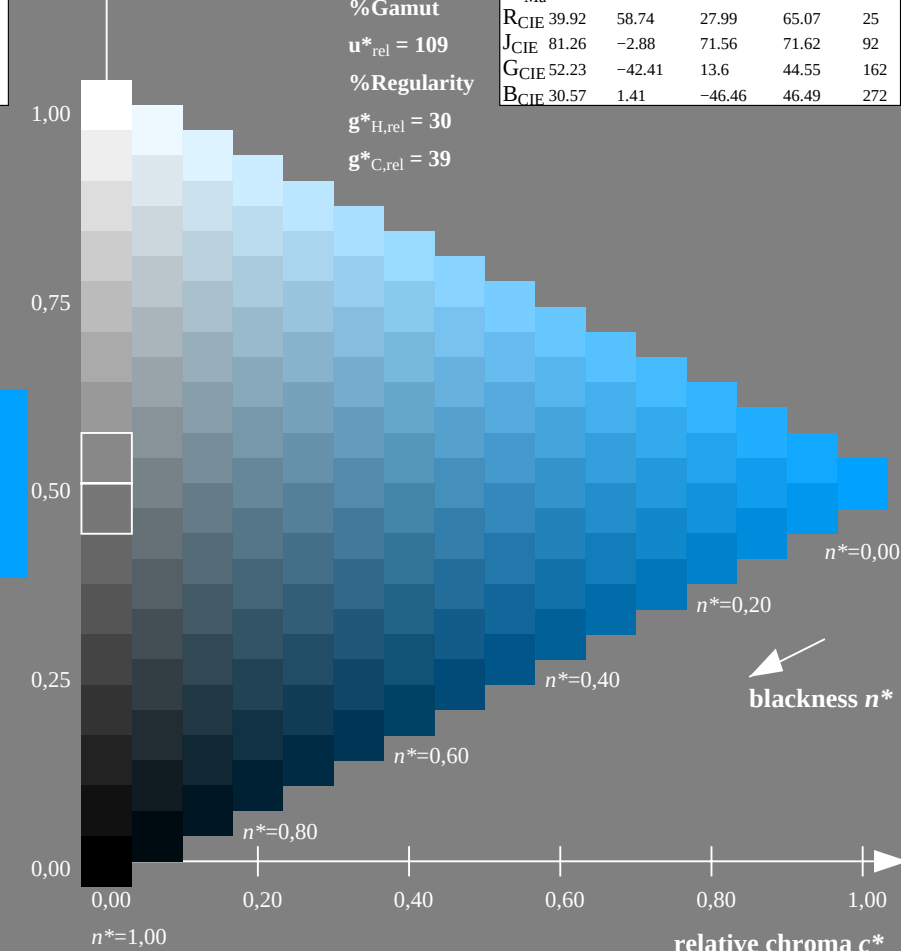
% Gamut

$u^*_{rel} = 109$

% Regularity

$g^*_{H,rel} = 30$

$g^*_{C,rel} = 39$



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

Input: rgb ($\rightarrow rgb^*$) setrgbcolor

output: no change compared to input