

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

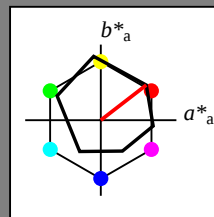
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 52 76 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.74	60.16	46.48	76.02	38
Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIE}	35.76	1.06	-43.09	43.11	271

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 38/360 = 0.105$

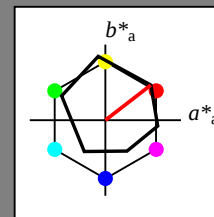
lab^*tch and lab^*nch

D65: hue O

LCH*Ma: 52 76 38

olv*Ma: 1.0 0.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

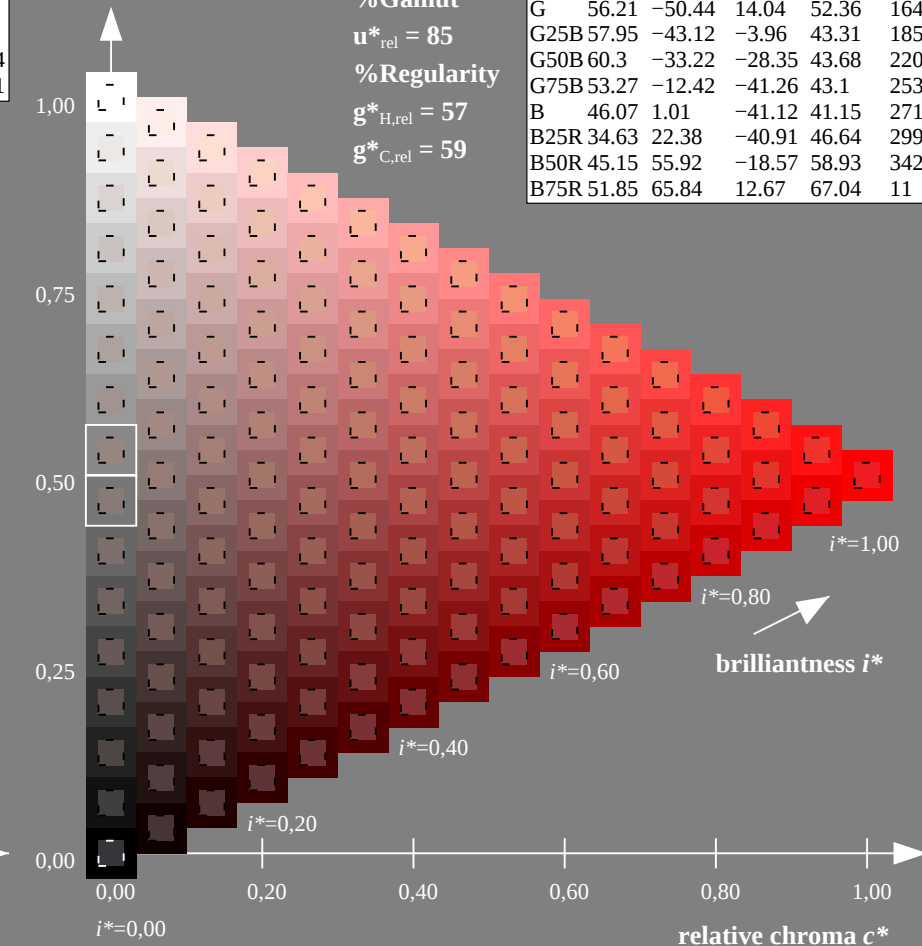
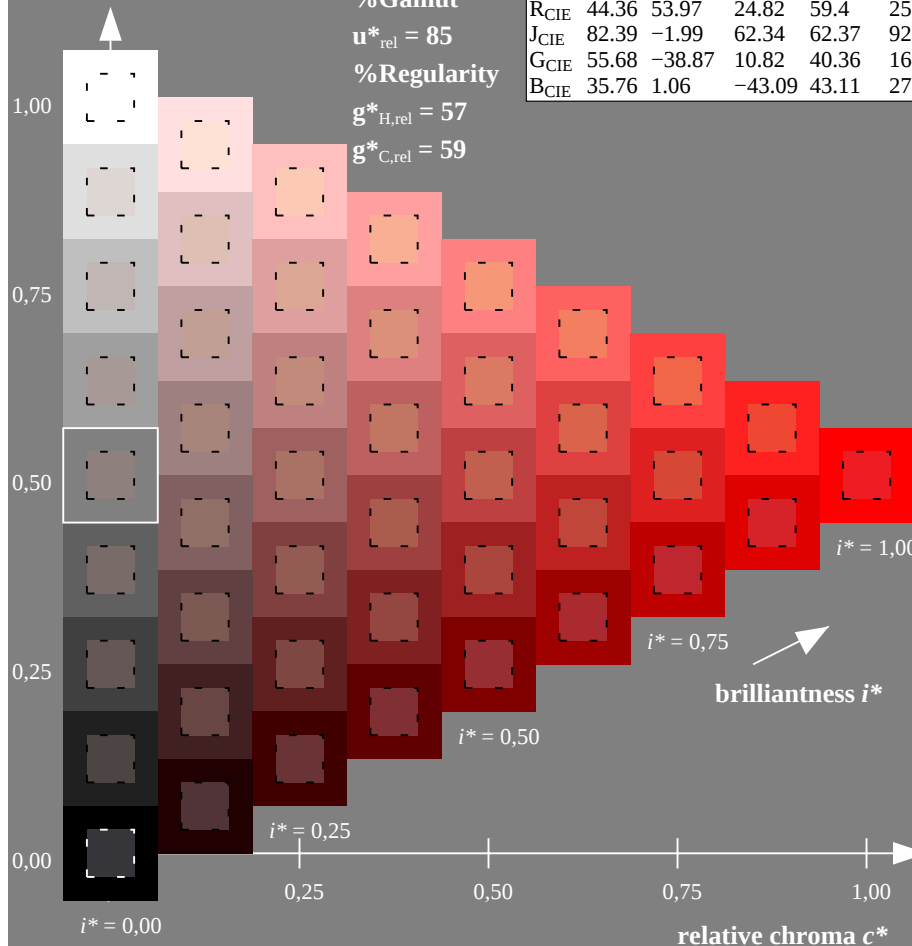
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R	51.79	63.09	29.02	69.44	25
R25J	53.73	56.6	48.42	74.48	41
R50J	65.47	35.67	59.82	69.65	59
R75J	76.51	15.98	70.55	72.34	77
J	86.93	-2.58	80.67	80.71	92
J25G	84.92	-17.23	75.99	77.92	103
J50G	73.11	-32.96	59.0	67.58	119
J75G	60.06	-50.34	40.22	64.44	141
G	56.21	-50.44	14.04	52.36	164
G25B	57.95	-43.12	-3.96	43.31	185
G50B	60.3	-33.22	-28.35	43.68	220
G75B	53.27	-12.42	-41.26	43.1	253
B	46.07	1.01	-41.12	41.15	271
B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	11



ZE830-7N, 9 step scales for constant CIELAB hue 38/360 = 0.105 (left)

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ZE830-7N, 16 step scales for constant CIELAB hue 38/360 = 0.105 (right)

BAM-test chart ZE83; Colorimetric systems, Page 1/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: no change compared to input

BAM registration: 20071001-ZE83/10L/L83E00NA.PS/.TXT BAM material: code=rhdata
application for evaluation and measurement of printer or monitor systems

Input: Colorimetric Offset Reflective System ORS18

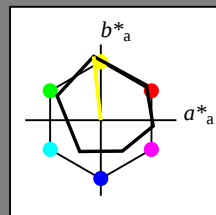
for hue $h^* = lab^*h = 96/360 = 0.268$

lab*tch and lab*nch

D65: hue Y

LCH*Ma: 91 85 96

olv*Ma: 1.0 1.0 0.0



%Gamut

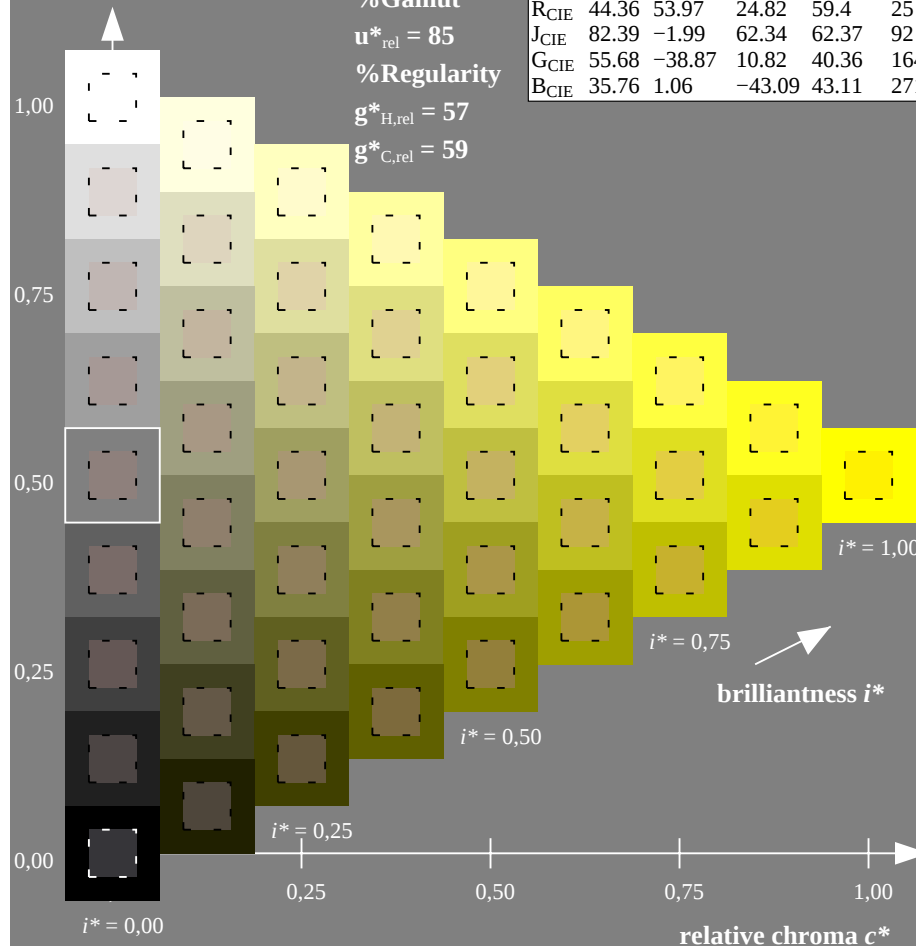
$$\mathbf{u}_{\text{rel}}^* = 85$$

%Regularity

$$g^*_{H_{rel}} = 57$$

■ $g^*_{C_{rel}} = 59$

ORS18; adapted (a)		CIELAB data			
	$L^* = L_a^*$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.74	60.16	46.48	76.02	38
Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIE}	35.76	1.06	-43.09	43.11	271



ZE830-7N, 9 step scales for constant CIELAB hue 96/360 = 0.268 (left)

BAM-test chart ZE83; Colorimetric systems, Page 2/10
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

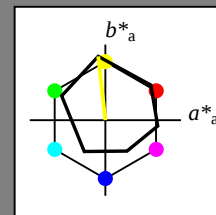
for hue $h^* = lab^*h = 96/360 = 0.268$

lab*tch and lab*nch

D65: hue Y

LCH*Ma: 91 85 96

olv*Ma: 1.0 1.0 0.0



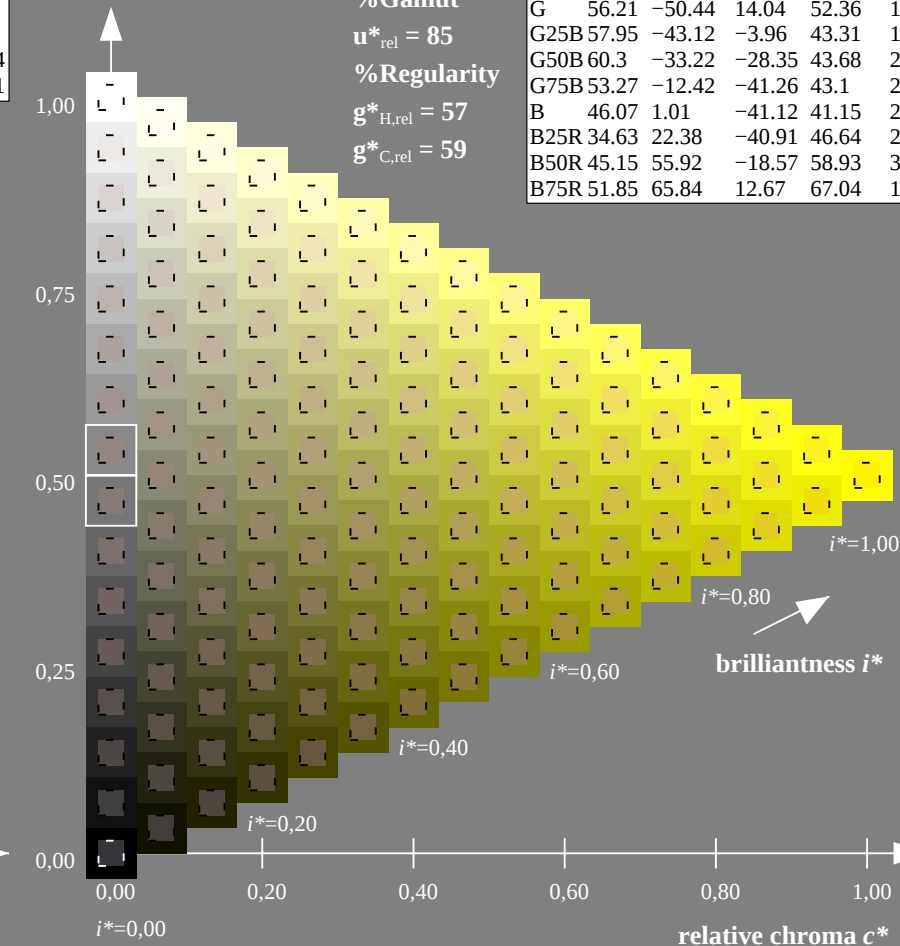
%Gamut

$$\mathbf{u}_{\text{rel}}^* = 85$$

%Regularity

$$g^*_{H_{rel}} = 57$$
$$g^*_{C_{rel}} = 59$$

	ORS18; adapted (a)			CIELAB data	
	$L^*_a = L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R	51.79	63.09	29.02	69.44	25
R25J	53.73	56.6	48.42	74.48	41
R50J	65.47	35.67	59.82	69.65	59
R75J	76.51	15.98	70.55	72.34	77
J	86.93	-2.58	80.67	80.71	92
J25G	84.92	-17.23	75.99	77.92	103
J50G	73.11	-32.96	59.0	67.58	119
J75G	60.06	-50.34	40.22	64.44	141
G	56.21	-50.44	14.04	52.36	164
G25B	57.95	-43.12	-3.96	43.31	185
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G75B	53.27	-12.42	-41.26	43.1	253
B	46.07	1.01	-41.12	41.15	271
B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	11



ZE830-7N, 16 step scales for constant CIELAB hue 96/360 = 0.268 (right)

input: *rgb / cmy0 set(rgb/cmyk)color*
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

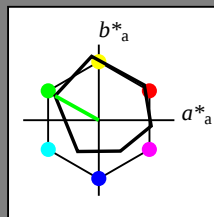
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 54 66 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.74	60.16	46.48	76.02	38
Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIE}	35.76	1.06	-43.09	43.11	271

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 151/360 = 0.419$

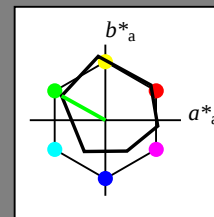
lab^*tch and lab^*nch

D65: hue L

LCH*Ma: 54 66 151

olv*Ma: 0.0 1.0 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

%Regularity

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

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

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	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R	51.79	63.09	29.02	69.44	25
R25J	53.73	56.6	48.42	74.48	41
R50J	65.47	35.67	59.82	69.65	59
R75J	76.51	15.98	70.55	72.34	77
J	86.93	-2.58	80.67	80.71	92
J25G	84.92	-17.23	75.99	77.92	103
J50G	73.11	-32.96	59.0	67.58	119
J75G	60.06	-50.34	40.22	64.44	141
G	56.21	-50.44	14.04	52.36	164
G25B	57.95	-43.12	-3.96	43.31	185
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G75B	53.27	-12.42	-41.26	43.1	253
B	46.07	1.01	-41.12	41.15	271
B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	11

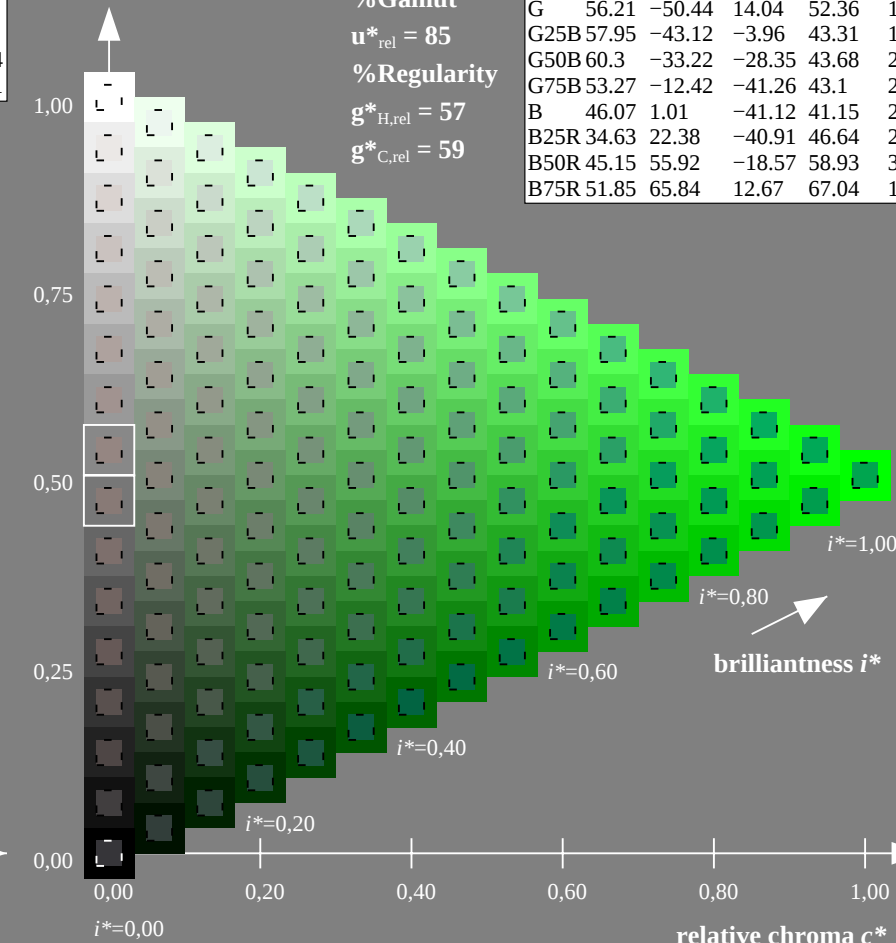
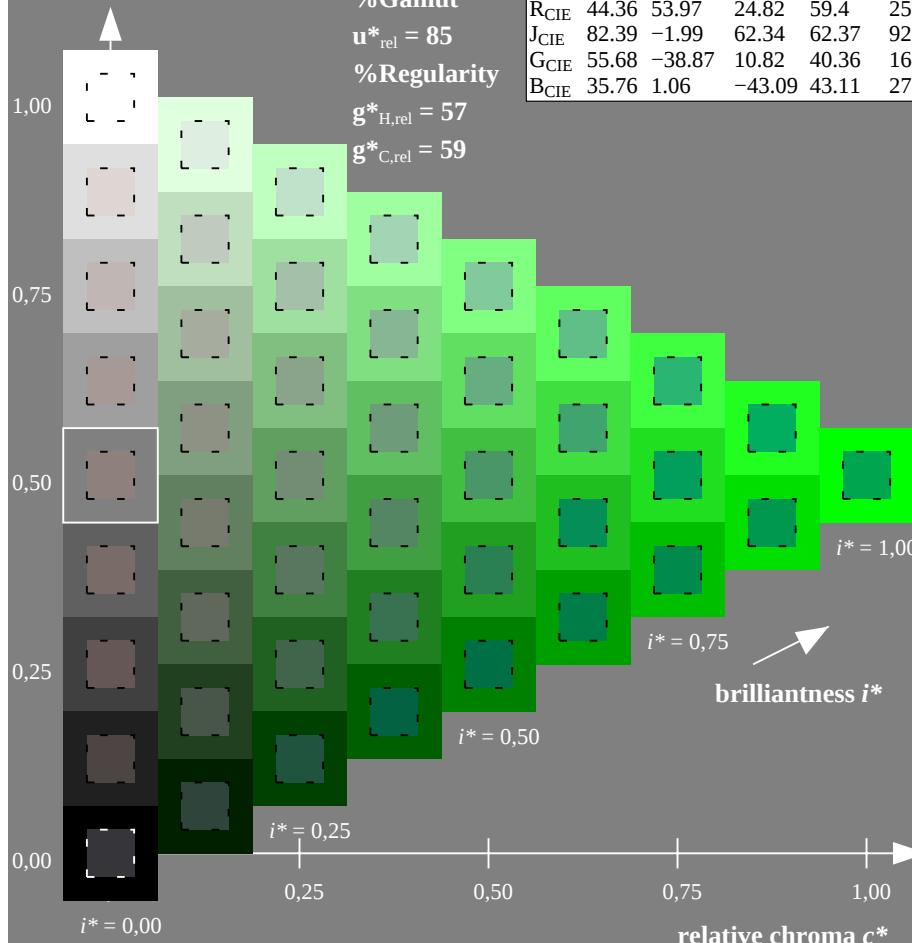
%Gamut

$u^*_{rel} = 85$

%Regularity

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

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



ZE830-7N, 9 step scales for constant CIELAB hue 151/360 = 0.419 (left)

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ZE830-7N, 16 step scales for constant CIELAB hue 151/360 = 0.419 (right)

BAM-test chart ZE83; Colorimetric systems, Page 3/10

D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmY0 set(rgb/cmyk)color$

output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

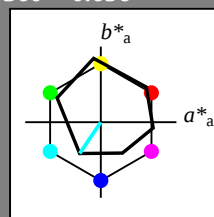
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 62 50 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

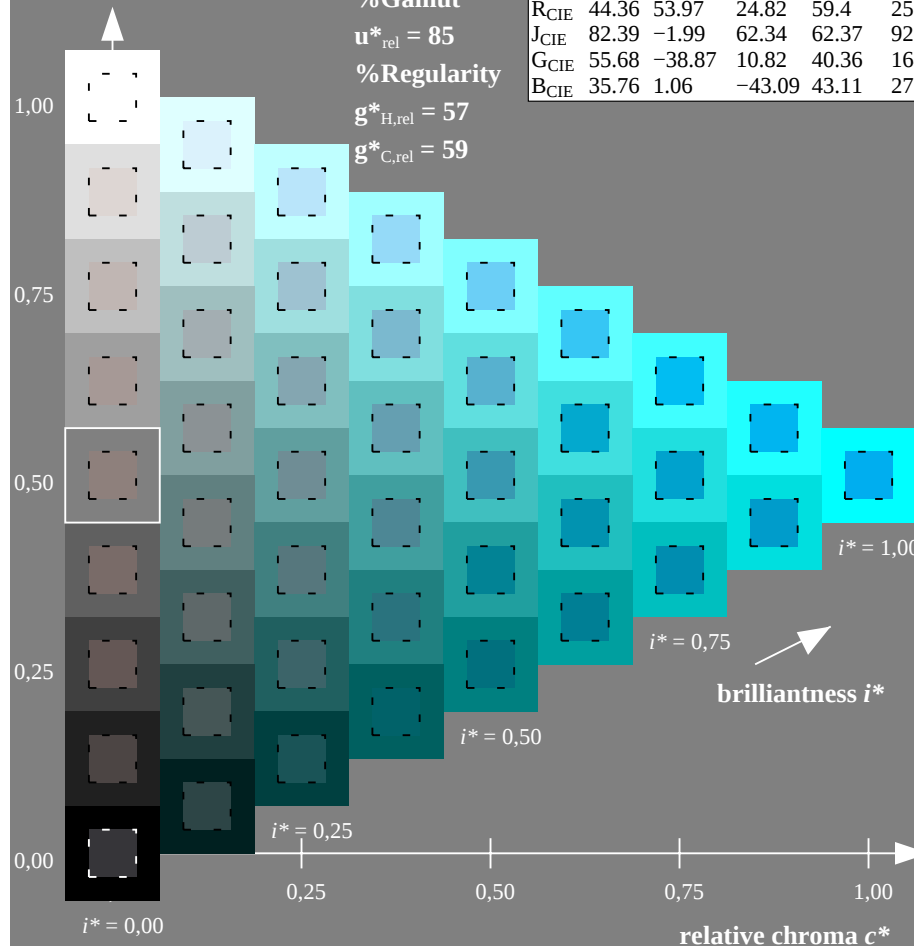
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.74	60.16	46.48	76.02	38
Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIE}	35.76	1.06	-43.09	43.11	271



ZE830-7N, 9 step scales for constant CIELAB hue 236/360 = 0.656 (left)

BAM-test chart ZE83; Colorimetric systems, Page 4/10
D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 236/360 = 0.656$

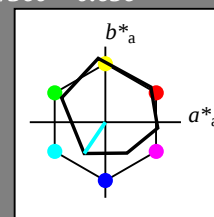
lab^*tch and lab^*nch

D65: hue C

LCH*Ma: 62 50 236

olv*Ma: 0.0 1.0 1.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

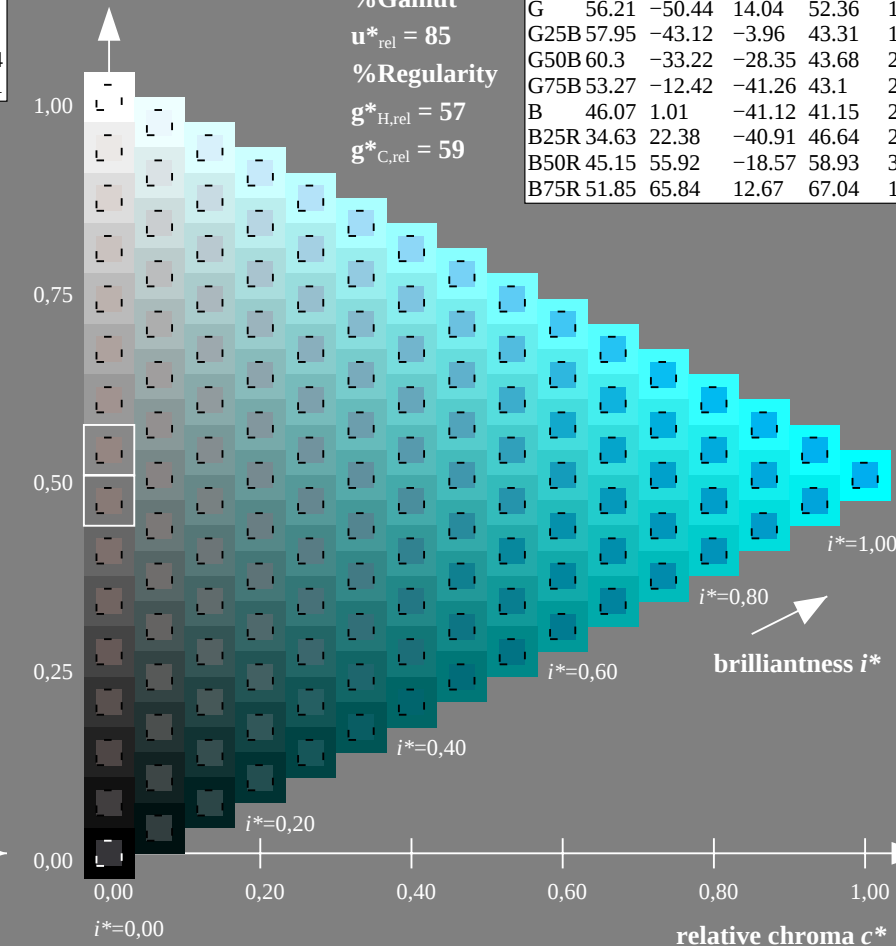
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
R	51.79	63.09	29.02	69.44	25
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B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	11



ZE830-7N, 16 step scales for constant CIELAB hue 236/360 = 0.656 (right)

input: $rgb / cmy0$ set($rgb/cmyk$)color
output: no change compared to input

Input: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

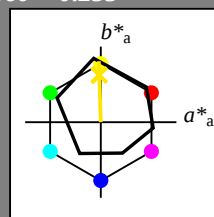
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 87 81 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
O _{Ma}	51.74	60.16	46.48	76.02	38
Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIE}	35.76	1.06	-43.09	43.11	271

Output: Colorimetric Offset Reflective System ORS18

for hue $h^* = lab^*h = 92/360 = 0.255$

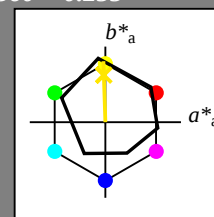
lab^*tch and lab^*nch

D65: hue J

LCH*Ma: 87 81 92

olv*Ma: 1.0 0.9 0.0

triangle lightness t^*



%Gamut

$u^*_{rel} = 85$

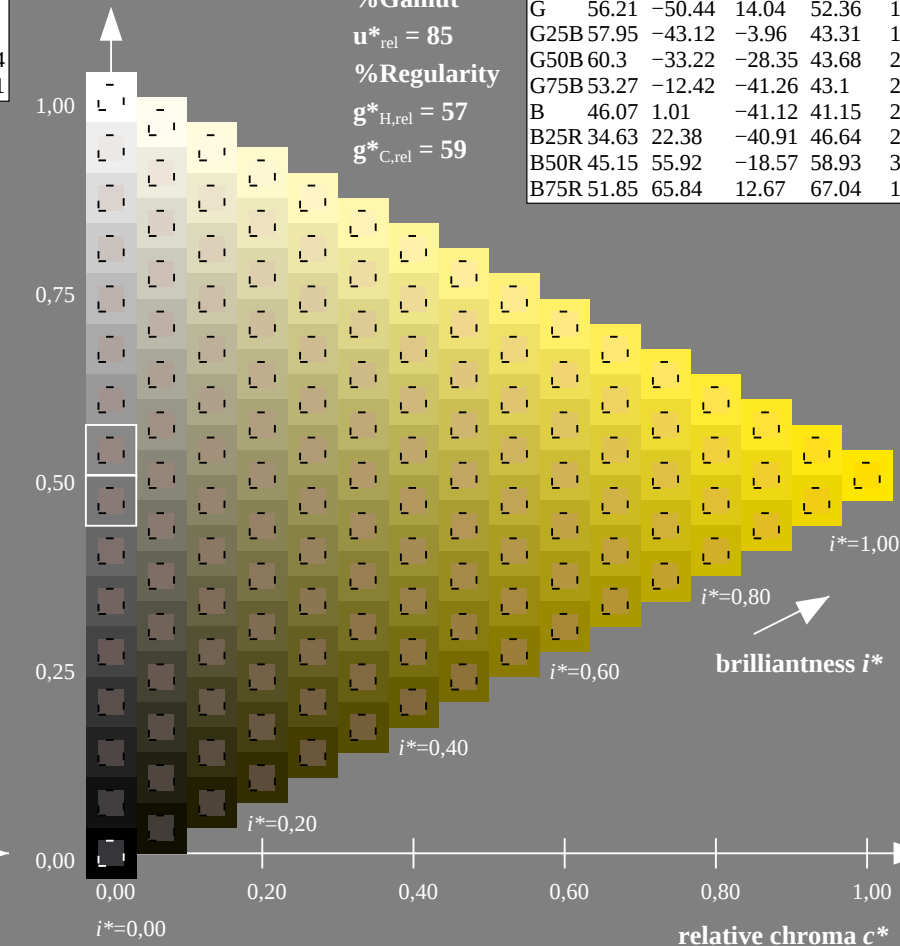
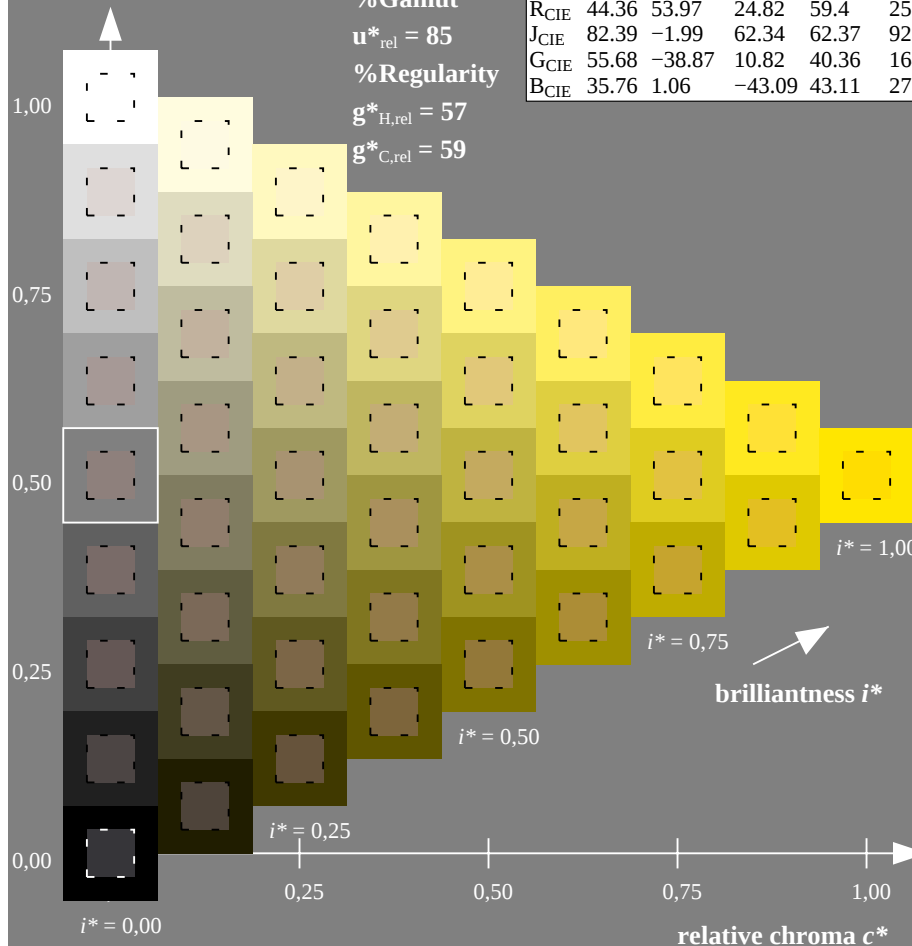
%Regularity

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

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

ORS18; adapted (a) CIELAB data

	$L^*=L^*_a$	a^*_a	b^*_a	$C^*_{ab,a}$	$h^*_{ab,a}$
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R25J	53.73	56.6	48.42	74.48	41
R50J	65.47	35.67	59.82	69.65	59
R75J	76.51	15.98	70.55	72.34	77
J	86.93	-2.58	80.67	80.71	92
J25G	84.92	-17.23	75.99	77.92	103
J50G	73.11	-32.96	59.0	67.58	119
J75G	60.06	-50.34	40.22	64.44	141
G	56.21	-50.44	14.04	52.36	164
G25B	57.95	-43.12	-3.96	43.31	185
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B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	11



ZE830-7N, 9 step scales for constant CIELAB hue 92/360 = 0.255 (left)

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ZE830-7N, 16 step scales for constant CIELAB hue 92/360 = 0.255 (right)

BAM-test chart ZE83; Colorimetric systems, Page 8/10
D65: 9 and 16 step colour scales for 10 hues

input: $rgb / cmY0 set(rgb/cmyk)color$
output: no change compared to input

BAM registration: 20071001-ZE83/10L/L83E00NA.PS/.TXT BAM material: code=rhdata
application for evaluation and measurement of printer or monitor systems

See for similar files: <http://www.ps.bam.de/ZE83>; www.ps.bam.de/ZE.HTM
 Technical information: <http://www.ps.bam.de> Version 2.1, io=1,1

BAM registration: 20071001-ZE8310/L83E00NA.PS.TXT BAM material: code=rha4ta
application for evaluation and measurement of printer or monitor systems

Input: Colorimetric Offset Reflective System ORS18

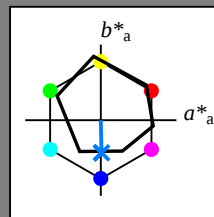
for hue $h^* = lab^*h = 271/360 = 0.754$

lab*tch and lab*nch

D65: hue B

LCH*Ma: 46 41 271

olv*Ma: 0.0 0.49 1.0



%Gamut

$$\mathbf{u}_{rel}^* = 85$$

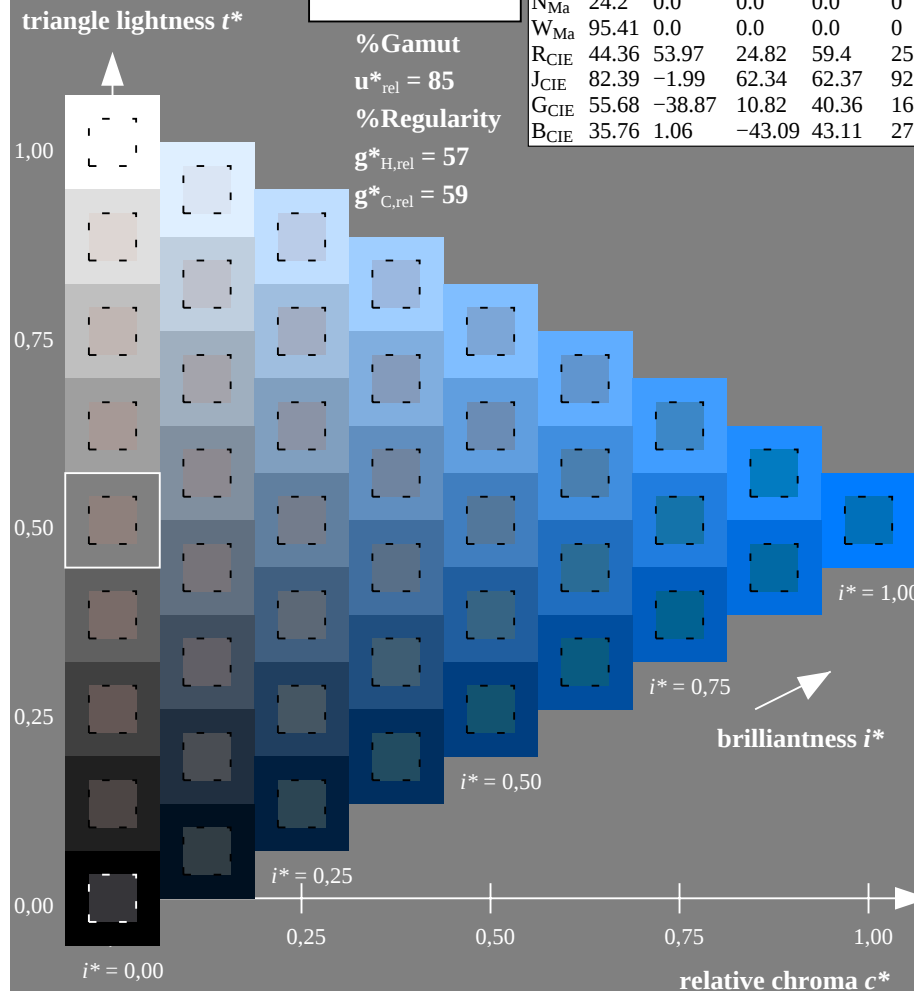
%Regularity

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

g*_{C,rel} = 59

ORS18; adapted (a) CIELAB data

	$L^*=L_a^*$	a_a^*	b_a^*	$C_{ab,a}^*$	$h_{ab,a}^*$
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Y _{Ma}	90.77	-9.44	84.41	84.94	96
L _{Ma}	54.46	-57.8	32.16	66.15	151
C _{Ma}	61.56	-27.91	-41.41	49.95	236
V _{Ma}	31.3	28.61	-40.85	49.88	305
M _{Ma}	51.91	69.26	-7.69	69.68	354
N _{Ma}	24.2	0.0	0.0	0.0	0
W _{Ma}	95.41	0.0	0.0	0.0	0
R _{CIE}	44.36	53.97	24.82	59.4	25
J _{CIE}	82.39	-1.99	62.34	62.37	92
G _{CIE}	55.68	-38.87	10.82	40.36	164
B _{CIF}	35.76	1.06	-43.09	43.11	271



ZE830-7N, 9 step scales for constant CIELAB hue 271/360 = 0.754 (left)

BAM-test chart ZE83: Colorimetric systems. Page 10/10

D65: 9 and 16 step colour scales for 10 hues

Output: Colorimetric Offset Reflective System ORS18

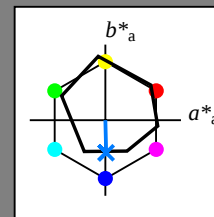
for hue $h^* = lab^*h = 271/360 = 0.754$

lab*tch and lab*nch

D65: hue B

LCH*Ma: 46 41 271

olv*Ma: 0.0 0.49 1.0



% Gamut

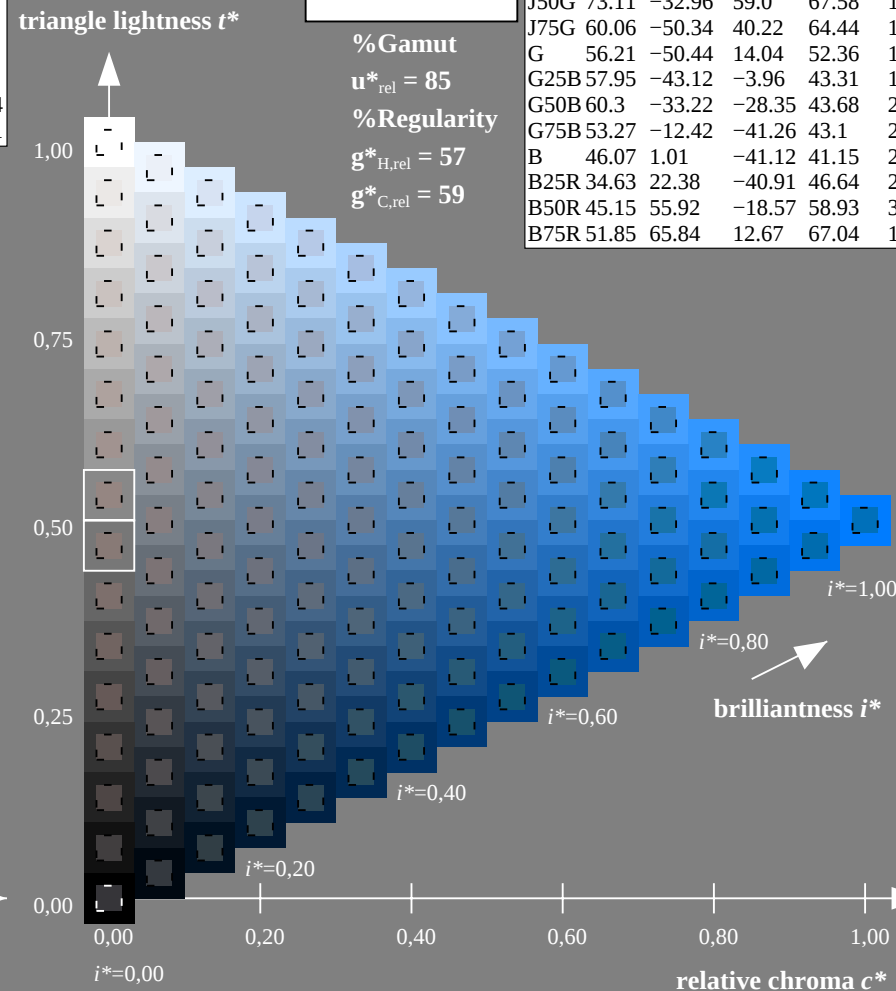
$$\mathbf{u}_{rel}^* = 85$$

%Regularity

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

ORS18; adapted (a) CIELAB data

	$L^* = L^*_{\text{a}}$	a^*_{a}	b^*_{a}	$C^*_{\text{ab,a}}$	$h^*_{\text{ab,a}}$
R	51.79	63.09	29.02	69.44	25
R25J	53.73	56.6	48.42	74.48	41
R50J	65.47	35.67	59.82	69.65	59
R75J	76.51	15.98	70.55	72.34	77
J	86.93	-2.58	80.67	80.71	92
J25G	84.92	-17.23	75.99	77.92	103
J50G	73.11	-32.96	59.0	67.58	119
J75G	60.06	-50.34	40.22	64.44	141
G	56.21	-50.44	14.04	52.36	164
G25B	57.95	-43.12	-3.96	43.31	185
G50B	60.3	-33.22	-28.35	43.68	220
G75B	53.27	-12.42	-41.26	43.1	253
B	46.07	1.01	-41.12	41.15	271
B25R	34.63	22.38	-40.91	46.64	299
B50R	45.15	55.92	-18.57	58.93	342
B75R	51.85	65.84	12.67	67.04	411



ZE830-7N, 16 step scales for constant CIELAB hue 271/360 = 0.754 (right)

```
input: rrgb / cmv0 set(rrgb/cmvk)color
```

output: no change compared to input